Site Index Curves and Tables for British Columbia: Coastal Species

by
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INTRODUCTION

The objective of this report is to disseminate, in graphical and tabular format, site index relationships selected by the Coastal Forest Productivity Council in cooperation with the Ministry of Forests and Lands for use on the coast of British Columbia. The species include coastal Douglas-fir (*Pseudotsuga menziesii* [Mirb.] Franco), western hemlock (*Tsuga heterophylla* [Raf.] Sarg.), western redcedar (*Thuja plicata* Donn), amabilis fir (*Abies amabilis* [Dougl.] Forb.), Sitka spruce (*Picea sitchensis* [Bong.] Carr.), and red alder (*Alnus rubra* Bong.).

The construction and selection of site curves is an ongoing process which reflects current management practices, available data, curve-fitting techniques, and developments by other agencies. For example, previous Ministry curves (Hegyi *et al.* 1979) were constructed for old-growth stands using data from temporary sample plots. Very little information had been collected in young stands. In later years, the need for site curves for second-growth forests coincided with the availability of stem analysis data, remeasured plot records, and more flexible modelling techniques. As well, site curves for second-growth stands in Washington and Oregon were available for testing.

The figures and corresponding tables were produced by a computerized plotting system, GRAFLEX, developed by the growth and yield staff of the MOFL Research Branch. The program can plot most of the site curves that have been used in British Columbia, and those that have potential application in the province. Iterative and algebraic techniques permit the construction of graphs and tables based on breast-height age or total age, and any reasonable index age. Output is limited to metric units.

SITE CURVES

Site curves recommended by the Coastal Forest Productivity Council are based on top height, breast-height age, and an index age of 50 years (see site height, site age, index age, and other definitions in Appendix 1 for supporting information). Top height, derived from the largest 100 trees per hectare, is an objective measure of site height unlike those based on subjectively selected dominants and codominants. It is employed in Europe, and is being accepted in Canada and the United States. Breast-height age is preferred because it is convenient to obtain, and tends to ignore the early development of site trees when non-site factors (such as animal damage and brush competition) can affect height growth. It has been adopted by most agencies in the western United States. The choice of breast-height age does not preclude the use of total age for other management purposes. The index age at which site productivity is referenced was lowered from the old-growth standard of 100 years to 50 years (1) to conform with current management practices in second-growth forests, and (2) to make stem analysis data bases more compatible with modelling techniques.

The source of each set of site curves is given in Table 1 along with limited information about the data and model employed. The original curves for all species except alder (Harrington and Curtis 1986) were referenced to breast-height age 50. The latter were translated from total age 20 to conform with Ministry standards. Curves for Douglas-fir, hemlock, and alder were converted from Imperial to metric units without compensating for differences in the height (1.30 vs. 1.37 m) at which age is determined. The authors used various definitions of site height. However, this will not affect estimates of site index obtained from this report using top height and age, because the curves are not sensitive to minor differences in tree selection procedures.

TABLE 1. Site index curves recommended for coastal British Columbia

Species	Source	Year	Agency	Data(#)	Model	Height	Age	Area
Douglas-fir	Bruce	1981	USFS	PSP(2796)	SCH	TOP 100	B50	BC-WA-OR
Hemlock	Wiley	1978	WEYCO	SA(90)	PRO	TOP 20%	B50	WA-OR
Cedar	Kurucz[a]	1985	MB	SA(151)	PRO	D & CD	B50	BC
Amabilis	Kurucz[b]	1982	MB	SA(191)	PRO	TOP 20%	B50	BC
Sitka	Barker and Goudie[c]	1987	WFP & MOFL	SA(133)	LOG	D	B50	BC(QC)
Alder	Harrington (revised)	1986 1987	USFS MOFL	SA(156)	R	D & CD	T20 B50	WA-OR

LEGEND

Agency		Model		Age	
MB	MacMillan Bloedel	PRO	Prodan	B50	Breast-height age 50
MOFL	Min. of Forests & Lands	R	Richards		
WEYCO	Weyerhaeuser Co.	SCH	Schumacher	T20	Total age 20
WFP	Western Forest Products	LOG	Log-logistic		
USFS	U.S. Forest Service				

Data		Height		Area	
SA	Stem analysis trees	TOP 100	Largest 100/ha	BC	British Columbia
PSP	Permanent sample plot observations	TOP 20%	Largest 20%	WA	Washington
		D	Dominants	OR	Oregon
		CD	Codominants	QC	Queen Charlotte Is.

[a] Kurucz, J.F. 1985. Metric SI tables for red cedar stands. MacMillan Bloedel Ltd., Woodlands Serv. Div., Nanaimo, B.C. Unpubl. Rep.
[b] Kurucz, J.F. 1982. Polymorphic site-index curves for balsam - *Abies amabilis* in coastal British Columbia. MacMillan Bloedel Ltd., Woodlands Serv. Div., Nanaimo, B.C. Res. Proj. 933-3. Unpubl. rep.
[c] Barker, J.E. and J.W. Goudie. 1987. Site index curves for Sitka spruce. B.C. For. Serv. Res. Br. Unpubl. Rep.

All formulations permit the shape of curves to vary across the range of sites. The curves are also conditioned algebraically (or adjusted by the plotting system) to pass through the appropriate site height at index age. That is, the predicted height of site trees on site 30 will be 30 m at breast-height age 50. BASIC language statements for calculating site curves are listed in Appendix 2. Results may differ slightly from the graphical and tabular information displayed in Appendix 3 in cases where the plotting/printing program adjusted the curves numerically. The equations in Appendix 2 should not be used to estimate height or assign site index below 20 years or beyond 150 years for coniferous species. The equations were not fitted to old-growth data, and could be grossly inaccurate if extended beyond the upper range of the data. Some formulations incorporate corrections to remove localized bias. Note that an adjustment applied to amabilis fir (Figure A-4) until age 50 introduces a minor irregularity at index age on low sites.

Equations for calculating "years to breast-height" accompanied all site curves except cedar. The relationship developed by King (1966) for Douglas-fir was employed for cedar because its "age correction" is similar to that of Douglas-fir (Hegyi *et al.* 1979). For alder, Harrington and Curtis (1986) recommended 1 year to breast height for site 29 and above, and 2 years for lower sites. Local experience suggests that 2 years be used for all sites in British Columbia. The juvenile height growth of Research Branch spacing trials (Omule 1987a, 1987b) indicates that the recommended number of years to breast-height (Appendix 3) could be reduced by 3 years for Douglas-fir, and 1 or 2 years for hemlock, cedar and Sitka spruce. However, these growth rates may be optimistic for operational conditions where planting care and cleaning are not as rigorous as in research trials.

The graphs and tables in Appendix 3 are for second-growth stands, and should not be applied to old-growth forests. Each graph for a particular coniferous species displays site curves for second-growth stands ranging in age (breast height) and site from 20 to 120 years and 15 to 45 m, respectively. Comparable information is provided in tabular form on the following two pages for the convenience of the user. Note that the ages in each table extend from 20 to 150 years, while sites range from 20 to 40 m. Comprehensive tables for Douglas-fir (1-150 yr; 15-45 m) are also included in yield tables by Mitchell and Cameron (1985). The range of ages and sites is different for alder. The approximate limit of the age and site data used to construct each set of curves is defined by a broken line in the tables. The graphs and tables may be used cautiously outside this region if the site index and age are within 5 m and 20 years, respectively, of the underlying data.

The site curves and tables are designed to estimate height, given age and site. They may also be used to estimate site based on measurements of height and age, at least for most practical purposes, even though the basic equations do not employ site index as a dependent variable (Curtis *et al.* 1974).

APPLICATION

The productivity of a stand in terms of its capacity to grow a particular species can be obtained from the appropriate graph or table after its breast-height age and top height have been measured. The site index of a stand of Douglas-fir, for example, which is 43.6 m tall (top height) and 65 years old (breast-height age), can be found by entering Table A-1 at age 65 and scanning right until 43.6 m is located between entries 43.0 and 44.2 under sites 37 and 38, respectively. This gives a site index of 37.5 m by interpolation. Alternatively, the site index can be found in Figure A-1 by locating a point directly above age 65 and to the right of 43.6 m, and following the trend of the curves to age 50. In this example, the point falls mid-way between two broken lines representing sites 37 and 38. The total age can be calculated by adding the years to breast height given at the bottom of Table A-1 (7 years), or to the left of the site index values positioned above age 50 in Figure A-1([6.7+7.5]/2=7.1 years).

Site index curves can be graphed over total age if this format is preferred. For example, a curve for Douglas-fir growing on site 30 can be drawn by plotting the appropriate heights given in Table A-1 (15.4, 16.0, 16.6, 17.3, etc.) over total age (breast-height age + 8 years to breast height), which gives a sequence of 28, 29, 30, 31, etc. Note that the curve will not achieve the index height of 30 m until 58 years of total age, which is equivalent to 50 years breast-height age.

The site curves developed for Douglas-fir by Bruce (1981) are similar to those of King (1966), and could be interchanged to take advantage of features unique to each formulation.

RECOMMENDATIONS

The site curves in this report should be applied cautiously, with attention given to their performance. Readers are asked to forward comments to the Coastal Forest Productivity Council,[1] along with any known sources of stem analysis data for second-growth and old-growth stands of coastal species of commercial importance. There is an urgent need to validate and refine the site curves recommended by the Council, and extend the program to include old-growth forests.

[1] D.C. Mogensen, Coordinator, Coastal Forest Productivity Council, c/o Inventory Branch, 1450 Government St., Victoria, B.C. V8W 3E7.

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Curtis, R.O., D.J. DeMars, and F.R. Herman. 1974. Which dependent variable in site index-height-age regressions? For. Sci. 20:74-87.

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Omule, S.A.Y. 1987a. Comparative height growth to age 28 for seven species in the CWHd Subzone. B.C. For. Serv., FRDA Rep. No. 5.

_____. 1987b. Juvenile height growth of four species on four sites in the CWHb1 Variant. B.C. For. Serv., FRDA Rep. No. 7.

Wiley, K.N. 1978. Site index tables for western hemlock in the Pacific Northwest. Weyerhaeuser Co., For. Res. Cent. For. Pap. 17.

APPENDIX 1: Definitions and Standards

The following information is relevant to the construction and application of site index curves for even-aged stands:

VARIABLES

Site Trees: trees selected to determine the productivity of a particular site of known area. They are the trees of largest diameter which correspond to a sampling fraction of 100 per hectare (e.g., 10/0.1-ha plot). They will be spread across the plot if the site productivity is uniform. Heterogeneous sites can be subdivided into smaller units and evaluated separately (e.g., select 10 site trees from each 0.1 ha subplot to determine the average site index of a 1-ha stand having a site gradient). Trees with disease and current or past top damage, and those which are appreciably younger or older than the average age of the stand, are excluded.

Site Height: average total height of site trees. The height of the 100 trees per hectare of largest diameter is commonly known as top height.

Site Age: average breast-height age of site trees based on a ring count at a height of 1.3 m above the point of germination.

Index Age: breast-height age 50 is the arbitrary reference age on which site index is based.

Site Index: top height at breast-height age 50. This measures the potential site productivity based on height growth.

Years to Breast-height: the average number of years site trees require to grow from seed to a height of 1.3 m. It can be subtracted from total age, if both are known, to obtain the age at breast-height. The relationship of years to breast-height and site index is usually derived from the stem analysis of young trees growing on a range of known sites.

Total Age: average number of years since the site trees germinated.

DISPLAY FORMAT

Steps of 5 m (e.g., 15, 20, 25, ..., 45 m) are recommended for displaying site curves because they form convenient classes (e.g., site class 20 spans 17.6-22.5 m). The curves may be supplemented with 1-m steps of a different line type if greater resolution is required. The practice of using site classes (e.g., G,M,P,L; I, II, ..., VII) is discouraged. Users are encouraged to adopt the following format to facilitate the comparison of graphical displays of height-age data and site curves:

AXIS	RANGE	LENGTH	SCALE	POSITION
Height	0-60 m	20 cm	3.0 m/cm	4-24 cm
Age	0-120 yr	16 cm	7.5 yr/cm	3-19 cm

APPENDIX 2: Metric Formulation of Site Equations

DOUGLAS-FIR (Bruce 1981)

```
YTOBH = 13.25 - SITE / 6.096 (King 1966)
B3 = -.477762 - .894427 * SITE / 30.48 + .793548
     * (SITE / 30.48) ^ 2 - .171666 * (SITE / 30.48) ^ 3
B2 = LOG (1.372 / SITE) / (YTOBH ^ B3 - (50 + YTOBH) ^ B3)
HT = SITE * EXP (B2 * ((AGE + 13.25 - SITE / 6.096) ^ B3
     - (50 + YTOBH ^ B3))
```

HEMLOCK (Wiley 1978)

```
YTOBH = 7.66 - .043 * (SITE / .3048) + 1.77
B1 =  -1.7307 + .1394 * 2500 / (SITE / .3048 - 4.5)
B2 =  -.0616 + .0137 * 2500 / (SITE / .3048 - 4.5)
B3 = .00192428 + .00007024 * 2500 / (SITE / .3048 - 4.5)
HT = 4.5 + AGE * AGE / (B1 + B2 * AGE + B3 * AGE * AGE)
IF AGE < 5 THEN HT = HT + .3 * AGE
IF AGE >= 5 AND AGE < 10 THEN HT = HT + 3 - .3 * AGE
HT = HT * .3048
```

***NOTE: equation is not conditioned to pass through index age and height on sites > 35. Graphs and tables in this report are conditioned.

CEDAR (Kurucz 1985)[a]

```
YTOBH = 13.25 - SITE / 6.096 (King 1966)
B1 = -3.11785 + .05027      * 2500 / (SITE - 1.3)
B2 =  -.02465 + .01411      * 2500 / (SITE - 1.3)
B3 =   .00174 + .000097667 * 2500 / (SITE - 1.3)
HT = 1.3 + AGE * AGE / (B1 + B2 * AGE + B3 * AGE * AGE)
IF (AGE > 50) HT = HT + .02379545 * HT - .000475909 * AGE * HT
```

AMABILIS (Kurucz 1982)[b]

```
YTOBH = MAX (18.47373 - .4086 * SITE, 5.0)
B1 = -2.3465 + .0565  * 2500 / (SITE - 1.3)
B2 = -.42007 + .01687 * 2500 / (SITE - 1.3)
B3 =  .00934 + .00004 * 2500 / (SITE - 1.3)
HT = 1.3 + AGE * AGE / (B1 + B2 * AGE + B3 * AGE * AGE)
IF AGE < 50 AND AGE * HT < 1695.3 THEN
     HT = HT - (.45773 - .00027 * AGE * HT)
```

SITKA (Barker and Goudie 1987)[c]

```
YTOBH = 11.7 - 0.185 * SITE
B1 = 1 + EXP(11.0605 - 1.5108*LOG(  50) - 1.5282*LOG(SITE-1.3))
B2 = 1 + EXP(11.0605 - 1.5108*LOG(AGE) - 1.5282*LOG(SITE-1.3))
HT = 1.3 + (SITE - 1.3) * B1 / B2
```

ALDER (Harrington and Curtis 1986)

```
YTOBH = 2
S20T = SITE ^ 1.5 / 8   *** NOTE: approximation
HT = S20T + (18.1622 + .7953 * S20T)
     * (1 - EXP ((.00194 - .002441 * S20T)
     * (AGE + YTOBH))) ^ .9198 - (18.1622 + .7953 * S20T)
     * (1 - EXP((.00194 - .002441 * S20T) * 20)) ^ .9198
```

LEGEND:

HT:	top height (metres)
AGE:	age at breast-height (years)
SITE:	top height at breast-height age 50 (metres)
YTOBH:	time required to reach breast-height (years)
LOG:	natural logarithm

---

[a] Kurucz, J.F. 1985. Metric SI tables for red cedar stands. MacMillan Bloedel Ltd, Woodlands Serv. Div., Nanaimo, B.C. Unpubl. Rep.

[b] Kurucz, J.F. 1982. Polymorphic site-index curves for balsam - *Abies amabilis* in coastal British Columbia. MacMillan Bloedel Ltd., Woodlands Serv. Div., Nanaimo, B.C. Res. Proj. 933-3. Unpubl. Rep.

[c] Barker, J.E. and J.W. Goudie. 1987. Site index curves for Sitka spruce. B.C. For. Serv. Res. Br. Unpubl. Rep.

ERRATA

K.J. Mitchell and K.R. Polsson. 1988. Site Index Curves and Tables for British Columbia: Coastal Species. Canada-B.C. Ministry of Forests. FRDA Report 037. p. 8. Appendix 3.

APPENDIX 3: Site Index Graphs and Tables

Species	Symbol	Sites	Ages	Figure	Table	Page
DOUGLAS-FIR	Fd	15-45 m	20-120 yr	A-1		9
		20-40	20-85		A-1	10
			85-150		A-1	11
HEMLOCK	Hw	15-45	20-120	A-2		13
		20-40	20-85		A-2	14
			85-150		A-2	15
CEDAR	Cw	15-45	20-120	A-3		17
		20-40	20-85		A-3	18
			85-150		A-3	19
AMABILIS FIR	Ba	15-45	20-120	A-4		21
		20-40	20-85		A-4	22
			85-150		A-4	23
SITKA SPRUCE	Ss	15-45	20-120	A-5		25
		20-40	20-85		A-5	26
			85-150		A-5	27
ALDER	Dr	15-40	10-120	A-6		28
		20-40	10-75		A-6	29

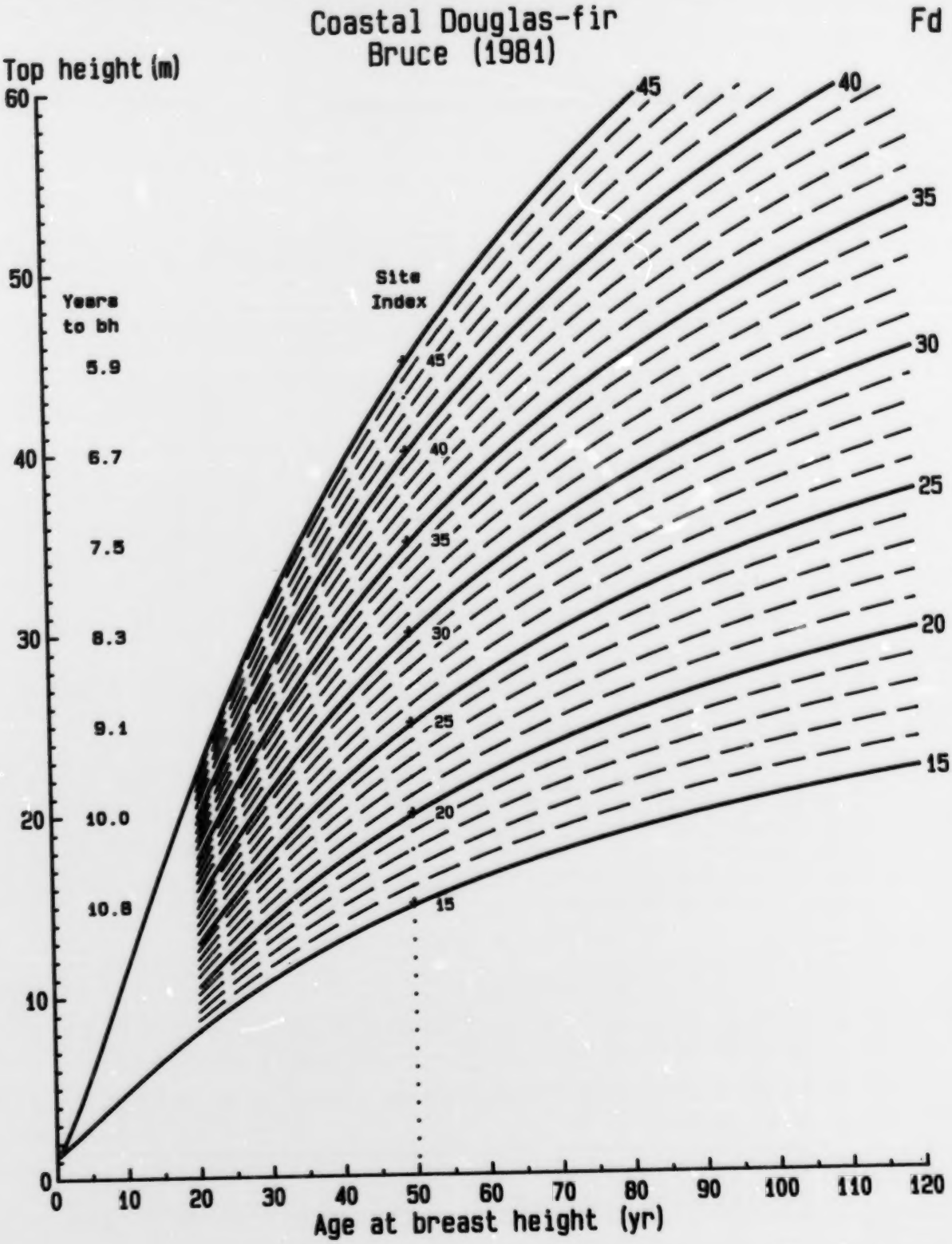

FIGURE A-I. Site index curves for second-growth coastal Douglas-fir.

TABLE A-I. Site index table for second-growth coastal Douglas-fir

Fd

Age @ bh (years)	Site index: top height (m) @ breast height age 50 (Bruce 1981)																				Age @ bh (years)
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
	Top height (m)																					
20	10.6	11.1	11.6	12.0	12.5	13.0	13.5	13.9	14.4	14.9	15.4	15.8	16.3	16.8	17.2	17.7	18.2	18.6	19.1	19.5	20.0	20
21	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	18.9	19.4	19.9	20.4	20.9	21
22	11.4	12.0	12.5	13.0	13.5	14.0	14.6	15.1	15.6	16.1	16.6	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22
23	11.8	12.4	12.9	13.5	14.0	14.6	15.1	15.6	16.2	16.7	17.3	17.8	18.3	18.9	19.4	19.9	20.5	21.0	21.5	22.0	22.6	23
24	12.2	12.8	13.4	13.9	14.5	15.1	15.6	16.2	16.7	17.3	17.9	18.4	19.0	19.5	20.1	20.6	21.2	21.7	22.3	22.8	23.4	24
25	12.6	13.2	13.8	14.4	15.0	15.5	16.1	16.7	17.3	17.9	18.5	19.0	19.6	20.2	20.8	21.3	21.9	22.5	23.1	23.6	24.2	25
26	13.0	13.6	14.2	14.8	15.4	16.0	16.6	17.2	17.8	18.4	19.0	19.6	20.2	20.8	21.4	22.0	22.6	23.2	23.8	24.4	25.0	26
27	13.3	14.0	14.6	15.2	15.9	16.5	17.1	17.7	18.4	19.0	19.6	20.2	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.8	27
28	13.7	14.3	15.0	15.6	16.3	16.9	17.6	18.2	18.9	19.5	20.2	20.8	21.5	22.1	22.7	23.4	24.0	24.6	25.3	25.9	26.5	28
29	14.0	14.7	15.4	16.1	16.7	17.4	18.1	18.7	19.4	20.1	20.7	21.4	22.0	22.7	23.4	24.0	24.7	25.3	26.0	26.6	27.3	29
30	14.4	15.1	15.8	16.5	17.1	17.8	18.5	19.2	19.9	20.6	21.3	21.9	22.6	23.3	24.0	24.6	25.3	26.0	26.7	27.3	28.0	30
31	14.7	15.4	16.1	16.9	17.6	18.3	19.0	19.7	20.4	21.1	21.8	22.5	23.2	23.9	24.6	25.3	26.0	26.6	27.3	28.0	28.7	31
32	15.1	15.8	16.5	17.2	18.0	18.7	19.4	20.1	20.9	21.6	22.3	23.0	23.7	24.4	25.2	25.9	26.6	27.3	28.0	28.7	29.4	32
33	15.4	16.1	16.9	17.6	18.4	19.1	19.8	20.6	21.3	22.1	22.8	23.5	24.3	25.0	25.7	26.5	27.2	27.9	28.6	29.4	30.1	33
34	15.7	16.5	17.2	18.0	18.7	19.5	20.3	21.0	21.8	22.5	23.3	24.0	24.8	25.6	26.3	27.0	27.8	28.5	29.3	30.0	30.8	34
35	16.0	16.8	17.6	18.3	19.1	19.9	20.7	21.5	22.2	23.0	23.8	24.6	25.3	26.1	26.9	27.6	28.4	29.1	29.9	30.7	31.4	35
36	16.3	17.1	17.9	18.7	19.5	20.3	21.1	21.9	22.7	23.5	24.3	25.0	25.8	26.6	27.4	28.2	29.0	29.7	30.5	31.3	32.1	36
37	16.6	17.4	18.2	19.0	19.9	20.7	21.5	22.3	23.1	23.9	24.7	25.5	26.3	27.1	27.9	28.7	29.5	30.3	31.1	31.9	32.7	37
38	16.9	17.7	18.6	19.4	20.2	21.0	21.9	22.7	23.5	24.3	25.2	26.0	26.8	27.6	28.5	29.3	30.1	30.9	31.7	32.5	33.3	38
39	17.2	18.0	18.9	19.7	20.6	21.4	22.3	23.1	23.9	24.8	25.6	26.5	27.3	28.1	29.0	29.8	30.6	31.5	32.3	33.1	33.9	39
40	17.5	18.3	19.2	20.1	20.9	21.8	22.6	23.5	24.3	25.2	26.1	26.9	27.8	28.6	29.5	30.3	31.2	32.0	32.9	33.7	34.6	40
41	17.7	18.6	19.5	20.4	21.2	22.1	23.0	23.9	24.7	25.6	26.5	27.4	28.2	29.1	30.0	30.8	31.7	32.6	33.4	34.3	35.1	41
42	18.0	18.9	19.8	20.7	21.6	22.5	23.4	24.2	25.1	26.0	26.9	27.8	28.7	29.6	30.4	31.3	32.2	33.1	34.0	34.8	35.7	42
43	18.3	19.2	20.1	21.0	21.9	22.8	23.7	24.6	25.5	26.4	27.3	28.2	29.1	30.0	30.9	31.8	32.7	33.6	34.5	35.4	36.3	43
44	18.5	19.5	20.4	21.3	22.2	23.1	24.1	25.0	25.9	26.8	27.7	28.6	29.6	30.5	31.4	32.3	33.2	34.1	35.0	35.9	36.8	44
45	18.8	19.7	20.7	21.6	22.5	23.5	24.4	25.3	26.3	27.2	28.1	29.1	30.0	30.9	31.8	32.8	33.7	34.6	35.5	36.5	37.4	45
46	19.0	20.0	20.9	21.9	22.8	23.8	24.7	25.7	26.6	27.6	28.5	29.5	30.4	31.3	32.3	33.2	34.2	35.1	36.1	37.0	37.9	46
47	19.3	20.3	21.2	22.2	23.1	24.1	25.1	26.0	27.0	27.9	28.9	29.9	30.8	31.8	32.7	33.7	34.6	35.6	36.6	37.5	38.5	47
48	19.5	20.5	21.5	22.5	23.4	24.4	25.4	26.3	27.3	28.3	29.3	30.2	31.2	32.2	33.2	34.1	35.1	36.1	37.0	38.0	39.0	48
49	19.8	20.8	21.7	22.7	23.7	24.7	25.7	26.7	27.7	28.7	29.6	30.6	31.6	32.6	33.6	34.6	35.6	36.5	37.5	38.5	39.5	49
50	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	50
51	20.2	21.2	22.3	23.3	24.3	25.3	26.3	27.3	28.3	29.3	30.4	31.4	32.4	33.4	34.4	35.4	36.4	37.5	38.5	39.5	40.5	51
52	20.5	21.5	22.5	23.5	24.6	25.6	26.6	27.6	28.7	29.7	30.7	31.7	32.8	33.8	34.8	35.8	36.9	37.9	38.9	40.0	41.0	52
53	20.7	21.7	22.7	23.8	24.8	25.9	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.2	37.3	38.3	39.4	40.4	41.5	53
54	20.9	21.9	23.0	24.0	25.1	26.1	27.2	28.2	29.3	30.3	31.4	32.4	33.5	34.5	35.6	36.6	37.7	38.8	39.8	40.9	41.9	54
55	21.1	22.2	23.2	24.3	25.3	26.4	27.5	28.5	29.6	30.7	31.7	32.8	33.8	34.9	36.0	37.0	38.1	39.2	40.3	41.3	42.4	55
56	21.3	22.4	23.5	24.5	25.6	26.7	27.7	28.8	29.9	31.0	32.0	33.1	34.2	35.3	36.4	37.4	38.5	39.6	40.7	41.8	42.8	56
57	21.5	22.6	23.7	24.8	25.8	26.9	28.0	29.1	30.2	31.3	32.4	33.5	34.5	35.6	36.7	37.8	38.9	40.0	41.1	42.2	43.3	57
58	21.7	22.8	23.9	25.0	26.1	27.2	28.3	29.4	30.5	31.6	32.7	33.8	34.9	36.0	37.1	38.2	39.3	40.4	41.5	42.6	43.7	58
59	21.9	23.0	24.1	25.2	26.3	27.4	28.5	29.7	30.8	31.9	33.0	34.1	35.2	36.3	37.4	38.6	39.7	40.8	41.9	43.0	44.2	59
60	22.1	23.2	24.3	25.5	26.6	27.7	28.8	29.9	31.0	32.2	33.3	34.4	35.5	36.7	37.8	38.9	40.1	41.2	42.3	43.5	44.6	60
61	22.3	23.4	24.6	25.7	26.8	27.9	29.1	30.2	31.3	32.5	33.6	34.7	35.9	37.0	38.1	39.3	40.4	41.6	42.7	43.9	45.0	61
62	22.5	23.6	24.8	25.9	27.0	28.2	29.3	30.5	31.6	32.7	33.9	35.0	36.2	37.3	38.5	39.6	40.8	41.9	43.1	44.3	45.4	62
63	22.7	23.8	25.0	26.1	27.3	28.4	29.6	30.7	31.9	33.0	34.2	35.3	36.5	37.6	38.8	40.0	41.1	42.3	43.5	44.7	45.8	63
64	22.9	24.0	25.2	26.3	27.5	28.6	29.8	31.0	32.1	33.3	34.5	35.6	36.8	38.0	39.1	40.3	41.5	42.7	43.9	45.0	46.2	64
65	23.0	24.2	25.4	26.5	27.7	28.9	30.0	31.2	32.4	33.6	34.7	35.9	37.1	38.3	39.5	40.7	41.8	43.0	44.2	45.4	46.6	65
66	23.2	24.4	25.6	26.7	27.9	29.1	30.3	31.5	32.6	33.8	35.0	36.2	37.4	38.6	39.8	41.0	42.2	43.4	44.6	45.8	47.0	66
67	23.4	24.6	25.8	26.9	28.1	29.3	30.5	31.7	32.9	34.1	35.3	36.5	37.7	38.9	40.1	41.3	42.5	43.7	45.0	46.2	47.4	67
68	23.6	24.8	26.0	27.1	28.3	29.5	30.7	31.9	33.1	34.3	35.6	36.8	38.0	39.2	40.4	41.6	42.9	44.1	45.3	46.5	47.8	68
69	23.7	24.9	26.1	27.3	28.5	29.8	31.0	32.2	33.4	34.6	35.8	37.0	38.3	39.5	40.7	41.9	43.2	44.4	45.7	46.9	48.2	69
70	23.9	25.1	26.3	27.5	28.8	30.0	31.2	32.4	33.6	34.8	36.1	37.3	38.5	39.8	41.0	42.3	43.5	44.8	46.0	47.3	48.5	70
71	24.1	25.3	26.5	27.7	29.0	30.2	31.4	32.6	33.9	35.1	36.3	37.6	38.8	40.1	41.3	42.6	43.8	45.1	46.3	47.6	48.9	71
72	24.2	25.5	26.7	27.9	29.1	30.4	31.6	32.9	34.1	35.3	36.6	37.8	39.1	40.3	41.6	42.9	44.1	45.4	46.7	48.0	49.2	72
73	24.4	25.6	26.9	28.1	29.3	30.6	31.8	33.1	34.3	35.6	36.8	38.1	39.4	40.6	41.9	43.2	44.4	45.7	47.0	48.3	49.6	73
74	24.5	25.8	27.0	28.3	29.5	30.8	32.0	33.3	34.5	35.8	37.1	38.3	39.6	40.9	42.2	43.5	44.7	46.0	47.3	48.6	49.9	74
75	24.7	26.0	27.2	28.5	29.7	31.0	32.2	33.5	34.8	36.0	37.3	38.6	39.9	41.2	42.5	43.7	45.0	46.3	47.7	49.0	50.3	75
76	24.9	26.1	27.4	28.6	29.9	31.2	32.4	33.7	35.0	36.3	37.6	38.8	40.1	41.4	42.7	44.0	45.3	46.7	48.0	49.3	50.6	76
77	25.0	26.3	27.5	28.8	30.1	31.4	32.6	33.9	35.2	36.5	37.8	39.1	40.4	41.7	43.0	44.3	45.6	47.0	48.3	49.6	51.0	77
78	25.2	26.4	27.7	29.0	30.3	31.6	32.8	34.1	35.4	36.7	38.0	39.3	40.6	41.9	43.3	44.6	45.9	47.3	48.6	49.9	51.3	78
79	25.3	26.6	27.9	29.2	30.4	31.7	33.0	34.3	35.6	36.9	38.2	39.6	40.9	42.2	43.5	44.9	46.2	47.5	48.9	50.2	51.6	79
80	25.4	26.7	28.0	29.3	30.6	31.9	33.2	34.5	35.8	37.1	38.5	39.8	41.1	42.4	43.8	45.1	46.5	47.8	49.2	50.6	51.9	80
81	25.6	26.9	28.2	29.5	30.8	32.1	33.4	34.7	36.0	37.4	38.7	40.0	41.4	42.7	44.0	45.4	46.8	48.1	49.5	50.9	52.2	81
82	25.7	27.0	28.3	29.6	31.0	32.3	33.6	34.9	36.2	37.6	38.9	40.2	41.6	42.9	44.3	45.7	47.0	48.4	49.8	51.2	52.6	82
83	25.9	27.2	28.5	29.8	31.1	32.5	33.8	35.1	36.4	37.8	39.1	40.5	41.8	43.2	44.5	45.9	47.3	48.7	50.1	51.5	52.9	83
84	26.0	27.3	28.6	30.0	31.3	32.6	34.0	35.3	36.6	38.0	39.3	40.7	42.0	43.4	44.8	46.2	47.6	49.0	50.4	51.8	53.2	84
85	26.1	27.5	28.8	30.1	31.5	32.8	34.1	35.5	36.8	38.2	39.5	40.9	42.3	43.7	45.0	46.4	47.8	49.2	50.6	52.0	53.5	85
Years to bh	10	10	10	10	9	9	9	9	9	9	8	8	8	8	8	8	7	7	7	7	7	Years to bh

continued

TABLE A-I. (Continued)

Fd

Age @ bh (years)	Site index: top height (m) @ breast height age 50 (Bruce 1981)																					Age @ bh (years)
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
	Top height (m)																					
85	26.1	27.5	28.8	30.1	31.5	32.8	34.1	35.5	36.8	38.2	39.5	40.9	42.3	43.7	45.0	46.4	47.8	49.2	50.6	52.0	53.5	85
86	26.3	27.6	28.9	30.3	31.6	33.0	34.3	35.7	37.0	38.4	39.7	41.1	42.5	43.9	45.3	46.7	48.1	49.5	50.9	52.3	53.8	86
87	26.4	27.7	29.1	30.4	31.8	33.1	34.5	35.8	37.2	38.6	39.9	41.3	42.7	44.1	45.5	46.9	48.3	49.8	51.2	52.6	54.1	87
88	26.5	27.9	29.2	30.6	31.9	33.3	34.7	36.0	37.4	38.8	40.1	41.5	42.9	44.3	45.7	47.2	48.6	50.0	51.5	52.9	54.3	88
89	26.7	28.0	29.4	30.7	32.1	33.5	34.8	36.2	37.6	39.0	40.3	41.7	43.1	44.6	46.0	47.4	48.8	50.3	51.7	53.2	54.6	89
90	26.8	28.1	29.5	30.9	32.2	33.6	35.0	36.4	37.8	39.1	40.5	41.9	43.4	44.8	46.2	47.6	49.1	50.5	52.0	53.4	54.9	90
91	26.9	28.3	29.6	31.0	32.4	33.8	35.2	36.5	37.9	39.3	40.7	42.1	43.6	45.0	46.4	47.9	49.3	50.8	52.2	53.7	55.2	91
92	27.0	28.4	29.8	31.2	32.5	33.9	35.3	36.7	38.1	39.5	40.9	42.3	43.8	45.2	46.6	48.1	49.6	51.0	52.5	54.0	55.5	92
93	27.1	28.5	29.9	31.3	32.7	34.1	35.5	36.9	38.3	39.7	41.1	42.5	44.0	45.4	46.9	48.3	49.8	51.3	52.8	54.2	55.7	93
94	27.3	28.7	30.0	31.4	32.8	34.2	35.6	37.0	38.5	39.9	41.3	42.7	44.2	45.6	47.1	48.6	50.0	51.5	53.0	54.5	56.0	94
95	27.4	28.8	30.2	31.6	33.0	34.4	35.8	37.2	38.6	40.0	41.5	42.9	44.4	45.8	47.3	48.8	50.3	51.7	53.2	54.8	56.3	95
96	27.5	28.9	30.3	31.7	33.1	34.5	35.9	37.4	38.8	40.2	41.7	43.1	44.6	46.0	47.5	49.0	50.5	52.0	53.5	55.0	56.5	96
97	27.6	29.0	30.4	31.8	33.2	34.7	36.1	37.5	39.0	40.4	41.8	43.3	44.8	46.2	47.7	49.2	50.7	52.2	53.7	55.3	56.8	97
98	27.7	29.1	30.6	32.0	33.4	34.8	36.2	37.7	39.1	40.6	42.0	43.5	45.0	46.4	47.9	49.4	50.9	52.4	54.0	55.5	57.0	98
99	27.8	29.3	30.7	32.1	33.5	35.0	36.4	37.8	39.3	40.7	42.2	43.7	45.1	46.6	48.1	49.6	51.1	52.7	54.2	55.8	57.3	99
100	27.9	29.4	30.8	32.2	33.7	35.1	36.5	38.0	39.4	40.9	42.4	43.8	45.3	46.8	48.3	49.8	51.4	52.9	54.4	56.0	57.6	100
101	28.1	29.5	30.9	32.4	33.8	35.2	36.7	38.1	39.6	41.1	42.5	44.0	45.5	47.0	48.5	50.0	51.6	53.1	54.7	56.2	57.8	101
102	28.2	29.6	31.0	32.5	33.9	35.4	36.8	38.3	39.7	41.2	42.7	44.2	45.7	47.2	48.7	50.3	51.8	53.3	54.9	56.5	58.0	102
103	28.3	29.7	31.2	32.6	34.0	35.5	37.0	38.4	39.9	41.4	42.9	44.4	45.9	47.4	48.9	50.5	52.0	53.6	55.1	56.7	58.3	103
104	28.4	29.8	31.3	32.7	34.2	35.6	37.1	38.6	40.1	41.5	43.0	44.5	46.1	47.6	49.1	50.7	52.2	53.8	55.3	56.9	58.5	104
105	28.5	29.9	31.4	32.8	34.3	35.8	37.2	38.7	40.2	41.7	43.2	44.7	46.2	47.8	49.3	50.8	52.4	54.0	55.6	57.2	58.8	105
106	28.6	30.0	31.5	33.0	34.4	35.9	37.4	38.9	40.3	41.8	43.4	44.9	46.4	47.9	49.5	51.0	52.6	54.2	55.8	57.4	59.0	106
107	28.7	30.1	31.6	33.1	34.6	36.0	37.5	39.0	40.5	42.0	43.5	45.0	46.6	48.1	49.7	51.2	52.8	54.4	56.0	57.6	59.2	107
108	28.8	30.3	31.7	33.2	34.7	36.2	37.6	39.1	40.6	42.2	43.7	45.2	46.7	48.3	49.9	51.4	53.0	54.6	56.2	57.8	59.5	108
109	28.9	30.4	31.8	33.3	34.8	36.3	37.8	39.3	40.8	42.3	43.8	45.4	46.9	48.5	50.0	51.6	53.2	54.8	56.4	58.0	59.7	109
110	29.0	30.5	31.9	33.4	34.9	36.4	37.9	39.4	40.9	42.4	44.0	45.5	47.1	48.6	50.2	51.8	53.4	55.0	56.6	58.3	59.9	110
111	29.1	30.6	32.0	33.5	35.0	36.5	38.0	39.5	41.1	42.6	44.1	45.7	47.2	48.8	50.4	52.0	53.6	55.2	56.8	58.5	60.1	111
112	29.2	30.7	32.2	33.6	35.1	36.6	38.2	39.7	41.2	42.7	44.3	45.8	47.4	49.0	50.6	52.2	53.8	55.4	57.0	58.7	60.4	112
113	29.3	30.8	32.3	33.8	35.3	36.8	38.3	39.8	41.3	42.9	44.4	46.0	47.6	49.1	50.7	52.3	54.0	55.6	57.2	58.9	60.6	113
114	29.4	30.9	32.4	33.9	35.4	36.9	38.4	39.9	41.5	43.0	44.6	46.1	47.7	49.3	50.9	52.5	54.2	55.8	57.4	59.1	60.8	114
115	29.5	31.0	32.5	34.0	35.5	37.0	38.5	40.1	41.6	43.2	44.7	46.3	47.9	49.5	51.1	52.7	54.3	56.0	57.6	59.3	61.0	115
116	29.6	31.1	32.6	34.1	35.6	37.1	38.7	40.2	41.7	43.3	44.9	46.4	48.0	49.6	51.2	52.9	54.5	56.2	57.8	59.5	61.2	116
117	29.6	31.2	32.7	34.2	35.7	37.2	38.8	40.3	41.9	43.4	45.0	46.6	48.2	49.8	51.4	53.0	54.7	56.4	58.0	59.7	61.4	117
118	29.7	31.2	32.8	34.3	35.8	37.3	38.9	40.4	42.0	43.6	45.1	46.7	48.3	50.0	51.6	53.2	54.9	56.5	58.2	59.9	61.6	118
119	29.8	31.3	32.9	34.4	35.9	37.5	39.0	40.6	42.1	43.7	45.3	46.9	48.5	50.1	51.7	53.4	55.0	56.7	58.4	60.1	61.8	119
120	29.9	31.4	33.0	34.5	36.0	37.6	39.1	40.7	42.3	43.8	45.4	47.0	48.6	50.3	51.9	53.6	55.2	56.9	58.6	60.3	62.0	120
121	30.0	31.5	33.1	34.6	36.1	37.7	39.2	40.8	42.4	44.0	45.6	47.2	48.8	50.4	52.1	53.7	55.4	57.1	58.8	60.5	62.2	121
122	30.1	31.6	33.2	34.7	36.2	37.8	39.4	40.9	42.5	44.1	45.7	47.3	48.9	50.6	52.2	53.9	55.6	57.3	59.0	60.7	62.4	122
123	30.2	31.7	33.2	34.8	36.3	37.9	39.5	41.0	42.6	44.2	45.8	47.4	49.1	50.7	52.4	54.0	55.7	57.4	59.2	60.9	62.6	123
124	30.3	31.8	33.3	34.9	36.4	38.0	39.6	41.2	42.7	44.3	46.0	47.6	49.2	50.9	52.5	54.2	55.9	57.6	59.3	61.1	62.8	124
125	30.3	31.9	33.4	35.0	36.5	38.1	39.7	41.3	42.9	44.5	46.1	47.7	49.4	51.0	52.7	54.4	56.1	57.8	59.5	61.3	63.0	125
126	30.4	32.0	33.5	35.1	36.6	38.2	39.8	41.4	43.0	44.6	46.2	47.8	49.5	51.2	52.8	54.5	56.2	58.0	59.7	61.4	63.2	126
127	30.5	32.1	33.6	35.2	36.7	38.3	39.9	41.5	43.1	44.7	46.3	48.0	49.6	51.3	53.0	54.7	56.4	58.1	59.9	61.6	63.4	127
128	30.6	32.1	33.7	35.3	36.8	38.4	40.0	41.6	43.2	44.8	46.5	48.1	49.8	51.4	53.1	54.8	56.6	58.3	60.0	61.8	63.6	128
129	30.7	32.2	33.8	35.4	36.9	38.5	40.1	41.7	43.3	45.0	46.6	48.2	49.9	51.6	53.3	55.0	56.7	58.5	60.2	62.0	63.8	129
130	30.7	32.3	33.9	35.5	37.0	38.6	40.2	41.8	43.4	45.1	46.7	48.4	50.0	51.7	53.4	55.1	56.9	58.6	60.4	62.2	63.9	130
131	30.8	32.4	34.0	35.5	37.1	38.7	40.3	41.9	43.6	45.2	46.8	48.5	50.2	51.9	53.6	55.3	57.0	58.8	60.5	62.3	64.1	131
132	30.9	32.5	34.1	35.6	37.2	38.8	40.4	42.0	43.7	45.3	47.0	48.6	50.3	52.0	53.7	55.4	57.2	58.9	60.7	62.5	64.3	132
133	31.0	32.6	34.1	35.7	37.3	38.9	40.5	42.1	43.8	45.4	47.1	48.7	50.4	52.1	53.8	55.6	57.3	59.1	60.9	62.7	64.5	133
134	31.0	32.6	34.2	35.8	37.4	39.0	40.6	42.3	43.9	45.5	47.2	48.9	50.6	52.3	54.0	55.7	57.5	59.3	61.0	62.8	64.7	134
135	31.1	32.7	34.3	35.9	37.5	39.1	40.7	42.4	44.0	45.6	47.3	49.0	50.7	52.4	54.1	55.9	57.6	59.4	61.2	63.0	64.8	135
136	31.2	32.8	34.4	36.0	37.6	39.2	40.8	42.5	44.1	45.8	47.4	49.1	50.8	52.5	54.3	56.0	57.8	59.6	61.4	63.2	65.0	136
137	31.3	32.9	34.5	36.1	37.7	39.3	40.9	42.6	44.2	45.9	47.5	49.2	50.9	52.7	54.4	56.2	57.9	59.7	61.5	63.3	65.2	137
138	31.3	32.9	34.5	36.2	37.8	39.4	41.0	42.7	44.3	46.0	47.7	49.4	51.1	52.8	54.5	56.3	58.1	59.9	61.7	63.5	65.4	138
139	31.4	33.0	34.6	36.2	37.9	39.5	41.1	42.8	44.4	46.1	47.8	49.5	51.2	52.9	54.7	56.4	58.2	60.0	61.8	63.7	65.5	139
140	31.5	33.1	34.7	36.3	37.9	39.6	41.2	42.9	44.5	46.2	47.9	49.6	51.3	53.0	54.8	56.6	58.4	60.2	62.0	63.8	65.7	140
141	31.6	33.2	34.8	36.4	38.0	39.7	41.3	43.0	44.6	46.3	48.0	49.7	51.4	53.2	54.9	56.7	58.5	60.3	62.1	64.0	65.9	141
142	31.6	33.2	34.9	36.5	38.1	39.7	41.4	43.1	44.7	46.4	48.1	49.8	51.5	53.3	55.1	56.8	58.6	60.5	62.3	64.2	66.0	142
143	31.7	33.3	34.9	36.6	38.2	39.8	41.5	43.1	44.8	46.5	48.2	49.9	51.7	53.4	55.2	57.0	58.8	60.6	62.4	64.3	66.2	143
144	31.8	33.4	35.0	36.6	38.3	39.9	41.6	43.2	44.9	46.6	48.3	50.0	51.8	53.5	55.3	57.1	58.9	60.7	62.6	64.5	66.3	144
145	31.8	33.5	35.1	36.7	38.4	40.0	41.7	43.3	45.0	46.7	48.4	50.2	51.9	53.7	55.4	57.2	59.1	60.9	62.7	64.6	66.5	145
146	31.9	33.5	35.2	36.8	38.4	40.1	41.8	43.4	45.1	46.8	48.5	50.3	52.0	53.8	55.6	57.4	59.2	61.0	62.9	64.8	66.7	146
147	32.0	33.6	35.2	36.9	38.5	40.2	41.8	43.5	45.2	46.9	48.6	50.4	52.1	53.9	55.7	57.5	59.3	61.2	63.0	64.9	66.8	147
148	32.0	33.7	35.3	37.0	38.6	40.3	41.9	43.6	45.3	47.0	48.7	50.5	52.2	54.0	55.8	57.6	59.5	61.3	63.2	65.1	67.0	148
149	32.1	33.7	35.4	37.0	38.7	40.3	42.0	43.7	45.4	47.1	48.8	50.6	52.4	54.1	55.9	57.8	59.6	61.4	63.3	65.2	67.1	149
150	32.2	33.8	35.5	37.1	38.8	40.4	42.1	43.8	45.5	47.2	48.9	50.7	52.5	54.3	56.1	57.9	59.7	61.6	63.5	65.4	67.3	150
Years to bh	10	10	10	10	9	9	9	9	9	9	8	8	8	8	8	8	7	7	7	7	7	Years to bh

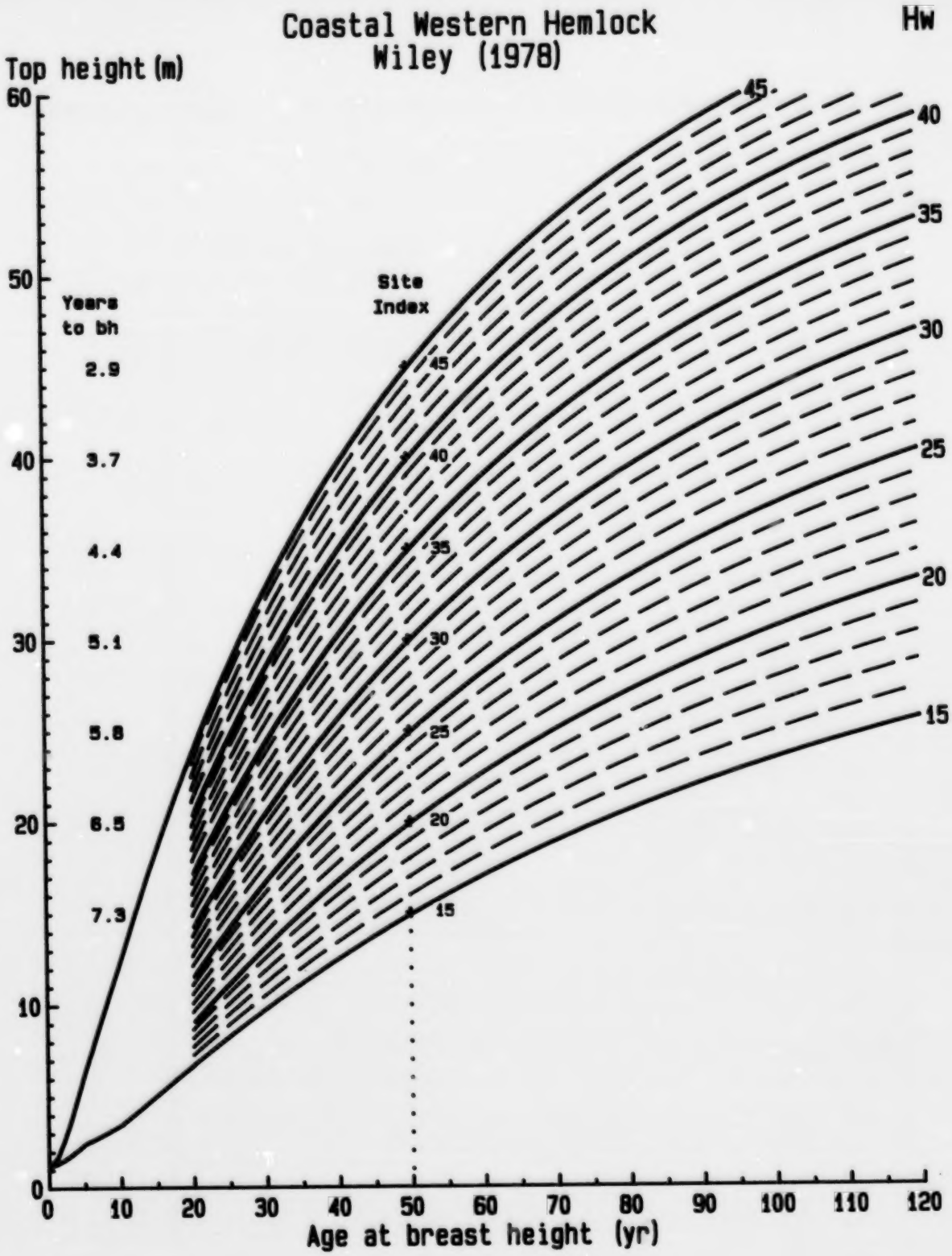

FIGURE A-2. Site index curves for second-growth coastal western hemlock.

TABLE A-2. Site index table for second-growth coastal western hemlock

Hw

Age @ bh (years)	Site index: top height (m) @ breast height age 50 (Wiley 1978)																				Age @ bh (years)
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	Top height (m)																				
20	9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.7	13.2	13.8	14.3	14.9	15.5	16.0	16.6	17.2	17.9	18.5	19.1	19.8	20.4
21	9.6	10.1	10.6	11.1	11.6	12.2	12.7	13.3	13.8	14.4	15.0	15.6	16.2	16.8	17.4	18.0	18.7	19.3	20.0	20.6	21.3
22	10.0	10.5	11.1	11.6	12.2	12.7	13.3	13.9	14.5	15.0	15.6	16.3	16.9	17.5	18.1	18.8	19.5	20.1	20.8	21.5	22.2
23	10.4	11.0	11.5	12.1	12.7	13.3	13.8	14.5	15.1	15.7	16.3	16.9	17.6	18.2	18.9	19.5	20.2	20.9	21.6	22.3	23.0
24	10.8	11.4	12.0	12.6	13.2	13.8	14.4	15.0	15.6	16.3	16.9	17.6	18.2	18.9	19.6	20.3	21.0	21.7	22.4	23.1	23.9
25	11.3	11.9	12.5	13.1	13.7	14.3	14.9	15.6	16.2	16.9	17.6	18.2	18.9	19.6	20.3	21.0	21.7	22.4	23.2	23.9	24.7
26	11.7	12.3	12.9	13.5	14.2	14.8	15.5	16.1	16.8	17.5	18.2	18.9	19.5	20.3	21.0	21.7	22.4	23.2	23.9	24.7	25.5
27	12.1	12.7	13.4	14.0	14.7	15.3	16.0	16.7	17.4	18.1	18.8	19.5	20.2	20.9	21.6	22.4	23.1	23.9	24.7	25.4	26.2
28	12.5	13.1	13.8	14.5	15.1	15.8	16.5	17.2	17.9	18.6	19.4	20.1	20.8	21.6	22.3	23.1	23.8	24.6	25.4	26.2	27.0
29	12.9	13.5	14.2	14.9	15.6	16.3	17.0	17.8	18.5	19.2	19.9	20.7	21.4	22.2	23.0	23.7	24.5	25.3	26.1	26.9	27.7
30	13.3	14.0	14.7	15.4	16.1	16.8	17.5	18.3	19.0	19.7	20.5	21.3	22.0	22.8	23.6	24.4	25.2	26.0	26.8	27.6	28.4
31	13.6	14.4	15.1	15.8	16.5	17.3	18.0	18.8	19.5	20.3	21.1	21.8	22.6	23.4	24.2	25.0	25.8	26.6	27.5	28.3	29.1
32	14.0	14.8	15.5	16.2	17.0	17.7	18.5	19.3	20.1	20.8	21.6	22.4	23.2	24.0	24.8	25.6	26.5	27.3	28.1	29.0	29.8
33	14.4	15.1	15.9	16.7	17.4	18.2	19.0	19.8	20.6	21.4	22.2	23.0	23.8	24.6	25.4	26.2	27.1	27.9	28.8	29.6	30.5
34	14.8	15.5	16.3	17.1	17.9	18.7	19.5	20.3	21.1	21.9	22.7	23.5	24.3	25.2	26.0	26.8	27.7	28.6	29.4	30.3	31.2
35	15.1	15.9	16.7	17.5	18.3	19.1	19.9	20.7	21.6	22.4	23.2	24.0	24.9	25.7	26.6	27.4	28.3	29.2	30.0	30.9	31.8
36	15.5	16.3	17.1	17.9	18.7	19.5	20.4	21.2	22.0	22.9	23.7	24.6	25.4	26.3	27.1	28.0	28.9	29.8	30.6	31.5	32.4
37	15.8	16.7	17.5	18.3	19.1	20.0	20.8	21.7	22.5	23.4	24.2	25.1	25.9	26.8	27.7	28.6	29.5	30.4	31.2	32.2	33.1
38	16.2	17.0	17.9	18.7	19.5	20.4	21.3	22.1	23.0	23.8	24.7	25.6	26.5	27.4	28.2	29.1	30.0	30.9	31.8	32.7	33.7
39	16.5	17.4	18.2	19.1	20.0	20.8	21.7	22.6	23.4	24.3	25.2	26.1	27.0	27.9	28.8	29.7	30.6	31.5	32.4	33.3	34.2
40	16.9	17.7	18.6	19.5	20.3	21.2	22.1	23.0	23.9	24.8	25.7	26.6	27.5	28.4	29.3	30.2	31.1	32.0	33.0	33.9	34.8
41	17.2	18.1	19.0	19.9	20.7	21.6	22.5	23.4	24.3	25.2	26.1	27.1	28.0	28.9	29.8	30.7	31.7	32.6	33.5	34.5	35.4
42	17.5	18.4	19.3	20.2	21.1	22.0	22.9	23.9	24.8	25.7	26.6	27.5	28.4	29.4	30.3	31.2	32.2	33.1	34.1	35.0	35.9
43	17.9	18.8	19.7	20.6	21.5	22.4	23.3	24.3	25.2	26.1	27.1	28.0	28.9	29.9	30.8	31.7	32.7	33.6	34.6	35.5	36.5
44	18.2	19.1	20.0	21.0	21.9	22.8	23.7	24.7	25.6	26.6	27.5	28.4	29.4	30.3	31.3	32.2	33.2	34.1	35.1	36.1	37.0
45	18.5	19.4	20.4	21.3	22.2	23.2	24.1	25.1	26.0	27.0	27.9	28.9	29.8	30.8	31.8	32.7	33.7	34.6	35.6	36.6	37.5
46	18.8	19.7	20.7	21.7	22.6	23.6	24.5	25.5	26.4	27.4	28.4	29.3	30.3	31.3	32.2	33.2	34.2	35.1	36.1	37.1	38.1
47	19.1	20.1	21.0	22.0	23.0	23.9	24.9	25.9	26.8	27.8	28.8	29.8	30.7	31.7	32.7	33.7	34.6	35.6	36.6	37.6	38.6
48	19.4	20.4	21.4	22.3	23.3	24.3	25.3	26.3	27.2	28.2	29.2	30.2	31.2	32.1	33.1	34.1	35.1	36.1	37.1	38.1	39.0
49	19.7	20.7	21.7	22.7	23.7	24.6	25.6	26.6	27.6	28.6	29.6	30.6	31.6	32.6	33.6	34.6	35.6	36.5	37.5	38.5	39.5
50	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0
51	20.3	21.3	22.3	23.3	24.3	25.3	26.4	27.4	28.4	29.4	30.4	31.4	32.4	33.4	34.4	35.4	36.4	37.4	38.4	39.5	40.5
52	20.6	21.6	22.6	23.6	24.7	25.7	26.7	27.7	28.7	29.8	30.8	31.8	32.8	33.8	34.8	35.9	36.9	37.9	38.9	39.9	40.9
53	20.9	21.9	22.9	24.0	25.0	26.0	27.1	28.1	29.1	30.1	31.2	32.2	33.2	34.2	35.3	36.3	37.3	38.3	39.3	40.3	41.4
54	21.1	22.2	23.2	24.3	25.3	26.3	27.4	28.4	29.5	30.5	31.5	32.6	33.6	34.6	35.7	36.7	37.7	38.7	39.7	40.8	41.8
55	21.4	22.5	23.5	24.6	25.6	26.7	27.7	28.8	29.8	30.9	31.9	32.9	34.0	35.0	36.1	37.1	38.1	39.1	40.2	41.2	42.2
56	21.7	22.7	23.8	24.9	25.9	27.0	28.1	29.1	30.2	31.2	32.3	33.3	34.4	35.4	36.4	37.5	38.5	39.5	40.6	41.6	42.6
57	21.9	23.0	24.1	25.2	26.2	27.3	28.4	29.5	30.5	31.6	32.6	33.7	34.7	35.8	36.8	37.9	38.9	39.9	41.0	42.0	43.0
58	22.2	23.3	24.4	25.5	26.5	27.6	28.7	29.8	30.8	31.9	33.0	34.0	35.1	36.1	37.2	38.2	39.3	40.3	41.4	42.4	43.5
59	22.5	23.6	24.6	25.8	26.8	27.9	29.0	30.1	31.2	32.2	33.3	34.4	35.4	36.5	37.6	38.6	39.7	40.7	41.8	42.8	43.8
60	22.7	23.8	24.9	26.0	27.1	28.2	29.3	30.4	31.5	32.6	33.7	34.7	35.8	36.9	37.9	39.0	40.0	41.1	42.1	43.2	44.2
61	23.0	24.1	25.2	26.3	27.4	28.5	29.6	30.7	31.8	32.9	34.0	35.1	36.1	37.2	38.3	39.3	40.4	41.5	42.6	43.6	44.6
62	23.2	24.3	25.5	26.6	27.7	28.8	29.9	31.0	32.1	33.2	34.3	35.4	36.5	37.6	38.6	39.7	40.8	41.8	42.9	43.9	45.0
63	23.5	24.6	25.7	26.9	28.0	29.1	30.2	31.3	32.4	33.5	34.6	35.7	36.8	37.9	39.0	40.0	41.1	42.2	43.2	44.3	45.4
64	23.7	24.8	26.0	27.1	28.3	29.4	30.5	31.6	32.7	33.8	35.0	36.1	37.1	38.2	39.3	40.4	41.5	42.5	43.6	44.7	45.7
65	23.9	25.1	26.2	27.4	28.5	29.7	30.8	31.9	33.0	34.2	35.3	36.4	37.5	38.6	39.6	40.7	41.8	42.9	43.9	45.0	46.1
66	24.2	25.3	26.5	27.7	28.8	29.9	31.1	32.2	33.3	34.5	35.6	36.7	37.8	38.9	40.0	41.1	42.2	43.2	44.3	45.4	46.4
67	24.4	25.6	26.7	27.9	29.1	30.2	31.4	32.5	33.6	34.8	35.9	37.0	38.1	39.2	40.3	41.4	42.5	43.6	44.6	45.7	46.8
68	24.6	25.8	27.0	28.2	29.3	30.5	31.6	32.8	33.9	35.0	36.2	37.3	38.4	39.5	40.6	41.7	42.8	43.9	45.0	46.0	47.1
69	24.9	26.1	27.2	28.4	29.6	30.7	31.9	33.1	34.2	35.3	36.5	37.6	38.7	39.8	40.9	42.0	43.1	44.2	45.3	46.4	47.4
70	25.1	26.3	27.5	28.7	29.8	31.0	32.2	33.3	34.5	35.6	36.8	37.9	39.0	40.1	41.2	42.3	43.4	44.5	45.6	46.7	47.8
71	25.3	26.5	27.7	28.9	30.1	31.3	32.4	33.6	34.8	35.9	37.0	38.2	39.3	40.4	41.5	42.6	43.7	44.8	45.9	47.0	48.1
72	25.5	26.7	27.9	29.1	30.3	31.5	32.7	33.9	35.0	36.2	37.3	38.5	39.6	40.7	41.8	42.9	44.1	45.1	46.2	47.3	48.4
73	25.7	27.0	28.2	29.4	30.6	31.8	32.9	34.1	35.3	36.4	37.6	38.7	39.9	41.0	42.1	43.2	44.4	45.4	46.5	47.6	48.7
74	26.0	27.2	28.4	29.6	30.8	32.0	33.2	34.4	35.6	36.7	37.9	39.0	40.2	41.3	42.4	43.5	44.6	45.7	46.8	47.9	49.0
75	26.2	27.4	28.6	29.8	31.0	32.2	33.4	34.6	35.8	37.0	38.1	39.3	40.4	41.6	42.7	43.8	44.9	46.0	47.1	48.2	49.3
76	26.4	27.6	28.8	30.1	31.3	32.5	33.7	34.9	36.1	37.2	38.4	39.6	40.7	41.8	43.0	44.1	45.2	46.3	47.4	48.5	49.6
77	26.6	27.8	29.1	30.3	31.5	32.7	33.9	35.1	36.3	37.5	38.7	39.8	41.0	42.1	43.2	44.4	45.5	46.6	47.7	48.8	49.9
78	26.8	28.0	29.3	30.5	31.7	32.9	34.2	35.4	36.6	37.7	38.9	40.1	41.2	42.4	43.5	44.6	45.8	46.9	48.0	49.1	50.2
79	27.0	28.2	29.5	30.7	32.0	33.2	34.4	35.6	36.8	38.0	39.2	40.3	41.5	42.6	43.8	44.9	46.0	47.2	48.3	49.4	50.4
80	27.2	28.4	29.7	30.9	32.2	33.4	34.6	35.9	37.0	38.2	39.4	40.6	41.7	42.9	44.0	45.2	46.3	47.4	48.5	49.6	50.7
81	27.4	28.6	29.9	31.2	32.4	33.6	34.9	36.1	37.3	38.5	39.7	40.8	42.0	43.2	44.3	45.4	46.6	47.7	48.8	49.9	51.0
82	27.6	28.8	30.1	31.4	32.6	33.8	35.1	36.3	37.5	38.7	39.9	41.1	42.2	43.4	44.6	45.7	46.8	47.9	49.1	50.2	51.3
83	27.7	29.0	30.3	31.6	32.8	34.1	35.3	36.5	37.7	38.9	40.1	41.3	42.5	43.7	44.8	45.9	47.1	48.2	49.3	50.4	51.5
84	27.9	29.2	30.5	31.8	33.0	34.3	35.5	36.8	38.0	39.2	40.4	41.6	42.7	43.9	45.1	46.2	47.3	48.5	49.6	50.7	51.8
85	28.1	29.4	30.7	32.0	33.2	34.5	35.7	37.0	38.2	39.4	40.6	41.8	43.0	44.1	45.3	46.4	47.6	48.7	49.8	50.9	52.0
Years to bh	7	6	6	6	6	6	6	6	5	5	5	5	5	5	5	4	4	4	4	4	4

TABLE A-2. (Continued)

Hw

Age @ bh (years)	Site index: top height (m) @ breast height age 50 (Wiley 1978)																					Age @ bh (years)
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
	Top height (m)																					
85	28.1	29.4	30.7	32.0	33.2	34.5	35.7	37.0	38.2	39.4	40.6	41.8	43.0	44.1	45.3	46.4	47.6	48.7	49.8	50.9	52.0	85
86	28.3	29.6	30.9	32.2	33.4	34.7	36.0	37.2	38.4	39.6	40.8	42.0	43.2	44.4	45.5	46.7	47.8	48.9	50.1	51.2	52.3	86
87	28.5	29.8	31.1	32.4	33.6	34.9	36.2	37.4	38.6	39.8	41.1	42.3	43.4	44.6	45.8	46.9	48.1	49.2	50.3	51.4	52.5	87
88	28.7	30.0	31.3	32.6	33.8	35.1	36.4	37.6	38.9	40.1	41.3	42.5	43.7	44.8	46.0	47.1	48.3	49.4	50.5	51.7	52.8	88
89	28.8	30.1	31.4	32.8	34.0	35.3	36.6	37.8	39.1	40.3	41.5	42.7	43.9	45.1	46.2	47.4	48.5	49.7	50.8	51.9	53.0	89
90	29.0	30.3	31.6	32.9	34.2	35.5	36.8	38.0	39.3	40.5	41.7	42.9	44.1	45.3	46.5	47.6	48.8	49.9	51.0	52.1	53.2	90
91	29.2	30.5	31.8	33.1	34.4	35.7	37.0	38.2	39.5	40.7	41.9	43.1	44.3	45.5	46.7	47.8	49.0	50.1	51.2	52.4	53.5	91
92	29.3	30.7	32.0	33.3	34.6	35.9	37.2	38.4	39.7	40.9	42.1	43.3	44.5	45.7	46.9	48.0	49.2	50.3	51.5	52.6	53.7	92
93	29.5	30.8	32.2	33.5	34.8	36.1	37.4	38.6	39.9	41.1	42.3	43.5	44.7	45.9	47.1	48.3	49.4	50.6	51.7	52.8	53.9	93
94	29.7	31.0	32.3	33.7	35.0	36.3	37.6	38.8	40.1	41.3	42.5	43.8	44.9	46.1	47.3	48.5	49.6	50.8	51.9	53.0	54.1	94
95	29.8	31.2	32.5	33.9	35.2	36.4	37.7	39.0	40.3	41.5	42.7	44.0	45.2	46.4	47.5	48.7	49.8	51.0	52.1	53.2	54.3	95
96	30.0	31.3	32.7	34.0	35.3	36.6	37.9	39.2	40.5	41.7	42.9	44.2	45.4	46.6	47.7	48.9	50.1	51.2	52.3	53.4	54.5	96
97	30.2	31.5	32.9	34.2	35.5	36.8	38.1	39.4	40.7	41.9	43.1	44.4	45.6	46.8	47.9	49.1	50.3	51.4	52.5	53.7	54.8	97
98	30.3	31.7	33.0	34.4	35.7	37.0	38.3	39.6	40.8	42.1	43.3	44.5	45.8	47.0	48.1	49.3	50.5	51.6	52.7	53.9	55.0	98
99	30.5	31.8	33.2	34.5	35.9	37.2	38.5	39.8	41.0	42.3	43.5	44.7	45.9	47.2	48.3	49.5	50.7	51.8	52.9	54.1	55.2	99
100	30.6	32.0	33.3	34.7	36.0	37.3	38.7	39.9	41.2	42.5	43.7	44.9	46.1	47.3	48.5	49.7	50.9	52.0	53.1	54.3	55.4	100
101	30.8	32.1	33.5	34.9	36.2	37.5	38.8	40.1	41.4	42.6	43.9	45.1	46.3	47.5	48.7	49.9	51.1	52.2	53.3	54.5	55.6	101
102	30.9	32.3	33.7	35.0	36.4	37.7	39.0	40.3	41.6	42.8	44.1	45.3	46.5	47.7	48.9	50.1	51.2	52.4	53.5	54.6	55.8	102
103	31.1	32.5	33.8	35.2	36.5	37.8	39.2	40.5	41.7	43.0	44.3	45.5	46.7	47.9	49.1	50.3	51.4	52.6	53.7	54.8	55.9	103
104	31.2	32.6	34.0	35.4	36.7	38.0	39.3	40.6	41.9	43.2	44.4	45.7	46.9	48.1	49.3	50.4	51.6	52.8	53.9	55.0	56.1	104
105	31.4	32.8	34.1	35.5	36.8	38.2	39.5	40.8	42.1	43.3	44.6	45.8	47.1	48.3	49.5	50.6	51.8	52.9	54.1	55.2	56.3	105
106	31.5	32.9	34.3	35.7	37.0	38.3	39.7	41.0	42.3	43.5	44.8	46.0	47.2	48.4	49.6	50.8	52.0	53.1	54.3	55.4	56.5	106
107	31.6	33.0	34.4	35.8	37.2	38.5	39.8	41.1	42.4	43.7	45.0	46.2	47.4	48.6	49.8	51.0	52.2	53.3	54.4	55.6	56.7	107
108	31.8	33.2	34.6	36.0	37.3	38.6	40.0	41.3	42.6	43.9	45.1	46.4	47.6	48.8	50.0	51.2	52.3	53.5	54.6	55.7	56.9	108
109	31.9	33.3	34.7	36.1	37.5	38.8	40.1	41.5	42.7	44.0	45.3	46.5	47.7	49.0	50.2	51.3	52.5	53.7	54.8	55.9	57.0	109
110	32.1	33.5	34.9	36.3	37.6	39.0	40.3	41.6	42.9	44.2	45.4	46.7	47.9	49.1	50.3	51.5	52.7	53.8	55.0	56.1	57.2	110
111	32.2	33.6	35.0	36.4	37.8	39.1	40.4	41.8	43.1	44.3	45.6	46.8	48.1	49.3	50.5	51.7	52.8	54.0	55.1	56.3	57.4	111
112	32.3	33.7	35.1	36.5	37.9	39.3	40.6	41.9	43.2	44.5	45.8	47.0	48.2	49.5	50.7	51.8	53.0	54.2	55.3	56.4	57.5	112
113	32.5	33.9	35.3	36.7	38.1	39.4	40.8	42.1	43.4	44.6	45.9	47.2	48.4	49.6	50.8	52.0	53.2	54.3	55.5	56.6	57.7	113
114	32.6	34.0	35.4	36.8	38.2	39.5	40.9	42.2	43.5	44.8	46.1	47.3	48.6	49.8	51.0	52.2	53.3	54.5	55.6	56.8	57.9	114
115	32.7	34.1	35.6	37.0	38.3	39.7	41.0	42.4	43.7	45.0	46.2	47.5	48.7	49.9	51.1	52.3	53.5	54.6	55.8	56.9	58.0	115
116	32.8	34.3	35.7	37.1	38.5	39.8	41.2	42.5	43.8	45.1	46.4	47.6	48.9	50.1	51.3	52.5	53.7	54.8	55.9	57.1	58.2	116
117	33.0	34.4	35.8	37.2	38.6	40.0	41.3	42.7	44.0	45.3	46.5	47.8	49.0	50.2	51.4	52.6	53.8	55.0	56.1	57.2	58.3	117
118	33.1	34.5	36.0	37.4	38.8	40.1	41.5	42.8	44.1	45.4	46.7	47.9	49.2	50.4	51.6	52.8	54.0	55.1	56.2	57.4	58.5	118
119	33.2	34.7	36.1	37.5	38.9	40.2	41.6	43.0	44.3	45.5	46.8	48.1	49.3	50.5	51.7	52.9	54.1	55.3	56.4	57.5	58.6	119
120	33.3	34.8	36.2	37.6	39.0	40.4	41.7	43.1	44.4	45.7	47.0	48.2	49.5	50.7	51.9	53.1	54.3	55.4	56.5	57.7	58.8	120
121	33.5	34.9	36.3	37.8	39.1	40.5	41.9	43.2	44.5	45.8	47.1	48.4	49.6	50.8	52.0	53.2	54.4	55.6	56.7	57.8	58.9	121
122	33.6	35.0	36.5	37.9	39.3	40.6	42.0	43.4	44.7	46.0	47.3	48.5	49.7	51.0	52.2	53.4	54.5	55.7	56.8	58.0	59.1	122
123	33.7	35.1	36.6	38.0	39.4	40.8	42.1	43.5	44.8	46.1	47.4	48.6	49.9	51.1	52.3	53.5	54.7	55.8	57.0	58.1	59.2	123
124	33.8	35.3	36.7	38.1	39.5	40.9	42.3	43.6	44.9	46.2	47.5	48.8	50.0	51.3	52.5	53.6	54.8	56.0	57.1	58.3	59.4	124
125	33.9	35.4	36.8	38.3	39.7	41.0	42.4	43.8	45.1	46.4	47.7	48.9	50.2	51.4	52.6	53.8	55.0	56.1	57.3	58.4	59.5	125
126	34.0	35.5	36.9	38.4	39.8	41.2	42.5	43.9	45.2	46.5	47.8	49.1	50.3	51.5	52.7	53.9	55.1	56.3	57.4	58.5	59.6	126
127	34.1	35.6	37.1	38.5	39.9	41.3	42.7	44.0	45.3	46.6	47.9	49.2	50.4	51.7	52.9	54.1	55.2	56.4	57.5	58.7	59.8	127
128	34.3	35.7	37.2	38.6	40.0	41.4	42.8	44.1	45.5	46.8	48.1	49.3	50.6	51.8	53.0	54.2	55.4	56.5	57.7	58.8	59.9	128
129	34.4	35.8	37.3	38.7	40.1	41.5	42.9	44.3	45.6	46.9	48.2	49.4	50.7	51.9	53.1	54.3	55.5	56.7	57.8	58.9	60.0	129
130	34.5	36.0	37.4	38.9	40.3	41.6	43.0	44.4	45.7	47.0	48.3	49.6	50.8	52.1	53.3	54.4	55.6	56.8	57.9	59.1	60.2	130
131	34.6	36.1	37.5	39.0	40.4	41.8	43.1	44.5	45.8	47.1	48.4	49.7	50.9	52.2	53.4	54.6	55.8	56.9	58.0	59.2	60.3	131
132	34.7	36.2	37.6	39.1	40.5	41.9	43.3	44.6	46.0	47.3	48.6	49.8	51.1	52.3	53.5	54.7	55.9	57.0	58.2	59.3	60.4	132
133	34.8	36.3	37.7	39.2	40.6	42.0	43.4	44.8	46.1	47.4	48.7	49.9	51.2	52.4	53.6	54.8	56.0	57.2	58.3	59.4	60.5	133
134	34.9	36.4	37.8	39.3	40.7	42.1	43.5	44.9	46.2	47.5	48.8	50.1	51.3	52.6	53.8	54.9	56.1	57.3	58.4	59.6	60.7	134
135	35.0	36.5	38.0	39.4	40.8	42.2	43.6	45.0	46.3	47.6	48.9	50.2	51.4	52.7	53.9	55.1	56.3	57.4	58.5	59.7	60.8	135
136	35.1	36.6	38.1	39.5	40.9	42.3	43.7	45.1	46.4	47.7	49.0	50.3	51.5	52.8	54.0	55.2	56.4	57.5	58.7	59.8	60.9	136
137	35.2	36.7	38.2	39.6	41.1	42.4	43.8	45.2	46.5	47.8	49.2	50.4	51.7	52.9	54.1	55.3	56.5	57.6	58.8	59.9	61.0	137
138	35.3	36.8	38.3	39.7	41.2	42.6	44.0	45.3	46.7	48.0	49.3	50.5	51.8	53.0	54.2	55.4	56.6	57.8	58.9	60.0	61.1	138
139	35.4	36.9	38.4	39.8	41.3	42.7	44.1	45.4	46.8	48.1	49.4	50.6	51.9	53.1	54.3	55.5	56.7	57.9	59.0	60.1	61.2	139
140	35.5	37.0	38.5	39.9	41.4	42.8	44.2	45.5	46.9	48.2	49.5	50.8	52.0	53.3	54.5	55.6	56.8	58.0	59.1	60.3	61.4	140
141	35.6	37.1	38.6	40.0	41.5	42.9	44.3	45.7	47.0	48.3	49.6	50.9	52.1	53.4	54.6	55.8	56.9	58.1	59.2	60.4	61.5	141
142	35.7	37.2	38.7	40.1	41.6	43.0	44.4	45.8	47.1	48.4	49.7	51.0	52.2	53.5	54.7	55.9	57.1	58.2	59.3	60.5	61.6	142
143	35.8	37.3	38.8	40.2	41.7	43.1	44.5	45.9	47.2	48.5	49.8	51.1	52.3	53.6	54.8	56.0	57.2	58.3	59.5	60.6	61.7	143
144	35.9	37.4	38.9	40.3	41.8	43.2	44.6	46.0	47.3	48.6	49.9	51.2	52.4	53.7	54.9	56.1	57.3	58.4	59.6	60.7	61.8	144
145	36.0	37.5	39.0	40.4	41.9	43.3	44.7	46.1	47.4	48.7	50.0	51.3	52.5	53.8	55.0	56.2	57.4	58.5	59.7	60.8	61.9	145
146	36.1	37.6	39.1	40.5	42.0	43.4	44.8	46.2	47.5	48.8	50.1	51.4	52.7	53.9	55.1	56.3	57.5	58.6	59.8	60.9	62.0	146
147	36.1	37.7	39.2	40.6	42.1	43.5	44.9	46.3	47.6	48.9	50.2	51.5	52.8	54.0	55.2	56.4	57.6	58.7	59.9	61.0	62.1	147
148	36.2	37.8	39.2	40.7	42.2	43.6	45.0	46.4	47.7	49.0	50.3	51.6	52.9	54.1	55.3	56.5	57.7	58.8	60.0	61.1	62.2	148
149	36.3	37.8	39.3	40.8	42.3	43.7	45.1	46.5	47.8	49.1	50.4	51.7	53.0	54.2	55.4	56.6	57.8	58.9	60.1	61.2	62.3	149
150	36.4	37.9	39.4	40.9	42.4	43.8	45.2	46.6	47.9	49.2	50.5	51.8	53.1	54.3	55.5	56.7	57.9	59.0	60.2	61.3	62.4	150
Years to bh	7	6	6	6	6	6	6	6	5	5	5	5	5	5	5	4	4	4	4	4	4	Years to bh

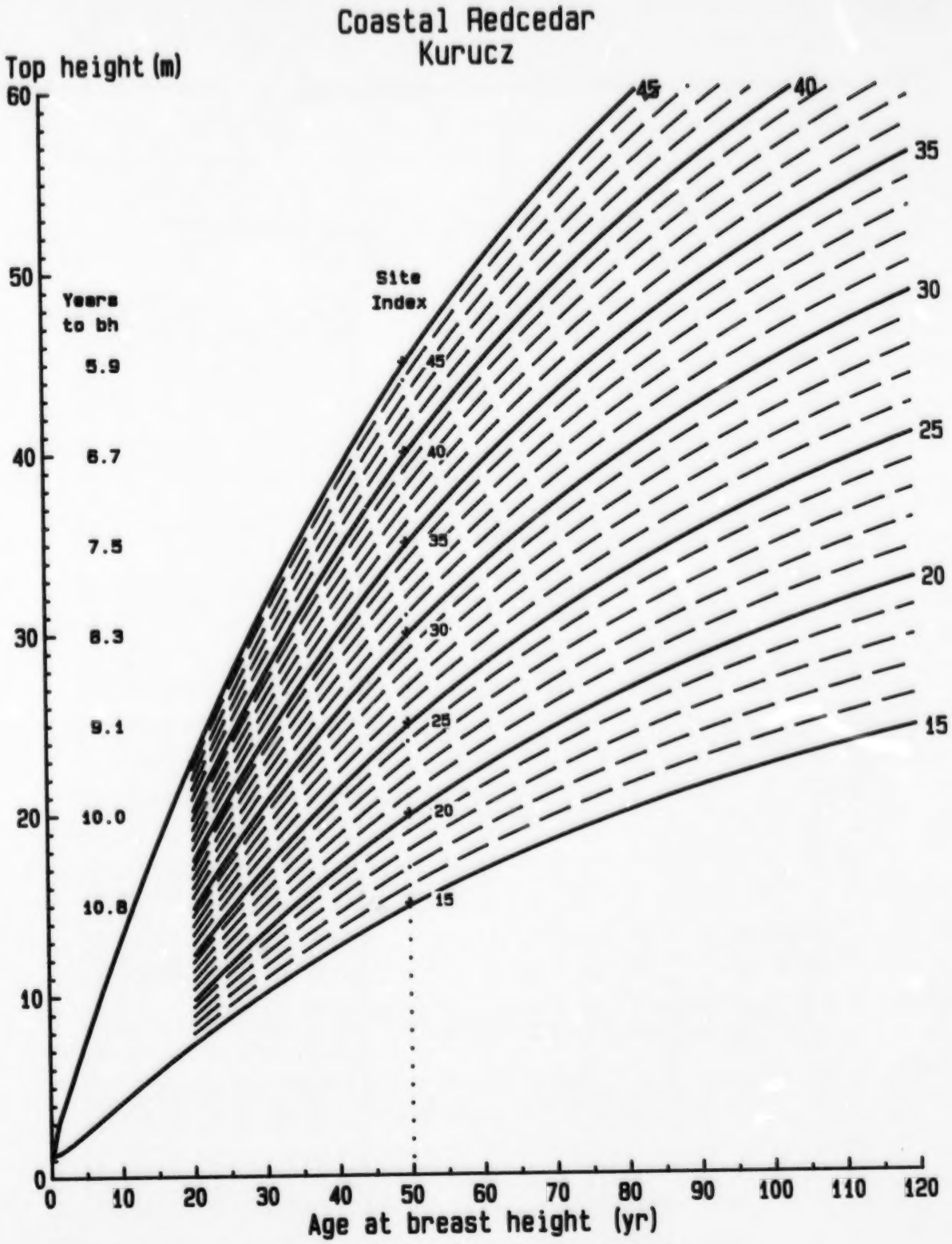

FIGURE A-3. Site index curves for second-growth coastal western redcedar.

TABLE A-3. Site index table for second-growth coastal western redcedar

CW

Age @ bh (years)	Site index: top height (m) @ breast height age 50 (Kurucz)																				Age @ bh (years)
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
	Top height (m)																					
20	9.9	10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.4	14.9	15.4	15.9	16.5	17.0	17.5	18.1	18.6	19.2	19.7	20.3	20
21	10.3	10.8	11.3	11.8	12.3	12.8	13.4	13.9	14.4	15.0	15.5	16.0	16.6	17.1	17.7	18.2	18.8	19.4	19.9	20.5	21.1	21
22	10.7	11.2	11.7	12.3	12.8	13.3	13.9	14.4	15.0	15.5	16.1	16.7	17.2	17.8	18.4	18.9	19.5	20.1	20.7	21.3	21.9	22
23	11.1	11.6	12.2	12.7	13.3	13.8	14.4	15.0	15.5	16.1	16.7	17.3	17.8	18.4	19.0	19.6	20.2	20.8	21.4	22.0	22.6	23
24	11.4	12.0	12.6	13.2	13.7	14.3	14.9	15.5	16.1	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.2	22.8	23.4	24
25	11.8	12.4	13.0	13.6	14.2	14.8	15.4	16.0	16.6	17.2	17.8	18.5	19.1	19.7	20.3	21.0	21.6	22.2	22.9	23.5	24.2	25
26	12.2	12.8	13.4	14.0	14.7	15.3	15.9	16.5	17.1	17.8	18.4	19.0	19.7	20.3	21.0	21.6	22.3	22.9	23.6	24.2	24.9	26
27	12.6	13.2	13.8	14.5	15.1	15.7	16.4	17.0	17.7	18.3	19.0	19.6	20.3	20.9	21.6	22.3	22.9	23.6	24.3	25.0	25.6	27
28	12.9	13.6	14.2	14.9	15.5	16.2	16.9	17.5	18.2	18.9	19.5	20.2	20.9	21.5	22.2	22.9	23.6	24.3	25.0	25.7	2[illegible]4	28
29	13.3	14.0	14.6	15.3	16.0	16.7	17.3	18.0	18.7	19.4	20.1	20.8	21.5	22.1	22.8	23.5	24.2	25.0	25.7	26.4	27.1	29
30	13.7	14.4	15.0	15.7	16.4	17.1	17.8	18.5	19.2	19.9	20.6	21.3	22.0	22.7	23.4	24.2	24.9	25.6	26.3	27.1	27.8	30
31	14.0	14.7	15.4	16.1	16.8	17.6	18.3	19.0	19.7	20.4	21.1	21.9	22.6	23.3	24.0	24.8	25.5	26.3	27.0	27.7	28.5	31
32	14.4	15.1	15.8	16.5	17.3	18.0	18.7	19.5	20.2	20.9	21.7	22.4	23.1	23.9	24.6	25.4	26.1	26.9	27.6	28.4	29.2	32
33	14.7	15.5	16.2	16.9	17.7	18.4	19.2	19.9	20.7	21.4	22.2	22.9	23.7	24.5	25.2	26.0	26.7	27.5	28.3	29.1	29.8	33
34	15.1	15.8	16.6	17.3	18.1	18.8	19.6	20.4	21.1	21.9	22.7	23.5	24.2	25.0	25.8	26.6	27.4	28.1	28.9	29.7	30.5	34
35	15.4	16.2	16.9	17.7	18.5	19.3	20.1	20.8	21.6	22.4	23.2	24.0	24.8	25.6	26.4	27.1	27.9	28.7	29.5	30.4	31.2	35
36	15.7	16.5	17.3	18.1	18.9	19.7	20.5	21.3	22.1	22.9	23.7	24.5	25.3	26.1	26.9	27.7	28.5	29.3	30.2	31.0	31.8	36
37	16.1	16.9	17.7	18.5	19.3	20.1	20.9	21.7	22.5	23.4	24.2	25.0	25.8	26.6	27.5	28.3	29.1	29.9	30.8	31.6	32.4	37
38	16.4	17.2	18.0	18.9	19.7	20.5	21.3	22.2	23.0	23.8	24.7	25.5	26.3	27.2	28.0	28.8	29.7	30.5	31.4	32.2	33.1	38
39	16.7	17.5	18.4	19.2	20.1	20.9	21.7	22.6	23.4	24.3	25.1	26.0	26.8	27.7	28.5	29.4	30.3	31.1	32.0	32.8	33.7	39
40	17.0	17.9	18.7	19.6	20.4	21.3	22.2	23.0	23.9	24.7	25.6	26.5	27.3	28.2	29.1	29.9	30.8	31.7	32.6	33.4	34.3	40
41	17.3	18.2	19.1	19.9	20.8	21.7	22.6	23.4	24.3	25.2	26.1	26.9	27.8	28.7	29.6	30.5	31.4	32.2	33.1	34.0	34.9	41
42	17.6	18.5	19.4	20.3	21.2	22.1	23.0	23.9	24.7	25.6	26.5	27.4	28.3	29.2	30.1	31.0	31.9	32.8	33.7	34.6	35.5	42
43	18.0	18.9	19.8	20.7	21.6	22.5	23.4	24.3	25.2	26.1	27.0	27.9	28.8	29.7	30.6	31.5	32.4	33.3	34.3	35.2	36.1	43
44	18.3	19.2	20.1	21.0	21.9	22.8	23.8	24.7	25.6	26.5	27.4	28.3	29.3	30.2	31.1	32.0	33.0	33.9	34.8	35.7	36.7	44
45	18.6	19.5	20.4	21.3	22.3	23.2	24.1	25.1	26.0	26.9	27.9	28.8	29.7	30.7	31.6	32.5	33.5	34.4	35.4	36.3	37.2	45
46	18.9	19.8	20.7	21.7	22.6	23.6	24.5	25.5	26.4	27.4	28.3	29.3	30.2	31.2	32.1	33.1	34.0	35.0	35.9	36.9	37.8	46
47	19.1	20.1	21.1	22.0	23.0	23.9	24.9	25.9	26.8	27.8	28.7	29.7	30.7	31.6	32.6	33.5	34.5	35.5	36.4	37.4	38.4	47
48	19.4	20.4	21.4	22.4	23.3	24.3	25.3	26.2	27.2	28.2	29.2	30.1	31.1	32.1	33.1	34.0	35.0	36.0	37.0	37.9	38.9	48
49	19.7	20.7	21.7	22.7	23.7	24.7	25.6	26.6	27.6	28.6	29.6	30.6	31.6	32.5	33.5	34.5	35.5	36.5	37.5	38.5	39.5	49
50	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	50
51	20.3	21.3	22.3	23.3	24.3	25.3	26.3	27.4	28.4	29.4	30.4	31.4	32.4	33.4	34.4	35.5	36.5	37.5	38.5	39.5	40.5	51
52	20.5	21.6	22.6	23.6	24.6	25.7	26.7	27.7	28.7	29.8	30.8	31.8	32.8	33.9	34.9	35.9	36.9	38.0	39.0	40.0	41.0	52
53	20.8	21.8	22.9	23.9	25.0	26.0	27.0	28.1	29.1	30.1	31.2	32.2	33.2	34.3	35.3	36.4	37.4	38.4	39.5	40.5	41.5	53
54	21.1	22.1	23.2	24.2	25.3	26.3	27.4	28.4	29.5	30.5	31.6	32.6	33.7	34.7	35.7	36.8	37.8	38.9	39.9	41.0	42.0	54
55	21.3	22.4	23.4	24.5	25.6	26.6	27.7	28.8	29.8	30.9	31.9	33.0	34.0	35.1	36.2	37.2	38.3	39.3	40.4	41.4	42.5	55
56	21.6	22.6	23.7	24.8	25.9	26.9	28.0	29.1	30.2	31.2	32.3	33.4	34.4	35.5	36.6	37.6	38.7	39.8	40.8	41.9	43.0	56
57	21.8	22.9	24.0	25.1	26.2	27.3	28.3	29.4	30.5	31.6	32.7	33.8	34.8	35.9	37.0	38.1	39.1	40.2	41.3	42.4	43.4	57
58	22.1	23.2	24.3	25.4	26.5	27.6	28.7	29.8	30.8	31.9	33.0	34.1	35.2	36.3	37.4	38.5	39.6	40.7	41.7	42.8	43.9	58
59	22.3	23.4	24.5	25.6	26.8	27.9	29.0	30.1	31.2	32.3	33.4	34.5	35.6	36.7	37.8	38.9	40.0	41.1	42.2	43.3	44.4	59
60	22.5	23.7	24.8	25.9	27.0	28.2	29.3	30.4	31.5	32.6	33.7	34.9	36.0	37.1	38.2	39.3	40.4	41.5	42.6	43.7	44.8	60
61	22.8	23.9	25.1	26.2	27.3	28.5	29.6	30.7	31.8	33.0	34.1	35.2	36.3	37.5	38.6	39.7	40.8	41.9	43.0	44.2	45.3	61
62	23.0	24.2	25.3	26.5	27.6	28.7	29.9	31.0	32.2	33.3	34.4	35.6	36.7	37.8	39.0	40.1	41.2	42.3	43.5	44.6	45.7	62
63	23.3	24.4	25.6	26.7	27.9	29.0	30.2	31.3	32.5	33.6	34.8	35.9	37.1	38.2	39.3	40.5	41.6	42.7	43.9	45.0	46.1	63
64	23.5	24.7	25.8	27.0	28.2	29.3	30.5	31.6	32.8	34.0	35.1	36.3	37.4	38.6	39.7	40.9	42.0	43.1	44.3	45.4	46.6	64
65	23.7	24.9	26.1	27.2	28.4	29.6	30.8	31.9	33.1	34.3	35.4	36.6	37.8	38.9	40.1	41.2	42.4	43.5	44.7	45.8	47.0	65
66	23.9	25.1	26.3	27.5	28.7	29.9	31.1	32.2	33.4	34.6	35.8	36.9	38.1	39.3	40.4	41.6	42.8	43.9	45.1	46.3	47.4	66
67	24.2	25.4	26.6	27.8	28.9	30.1	31.3	32.5	33.7	34.9	36.1	37.3	38.5	39.6	40.8	42.0	43.2	44.3	45.5	46.7	47.8	67
68	24.4	25.6	26.8	28.0	29.2	30.4	31.6	32.8	34.0	35.2	36.4	37.6	38.8	40.0	41.2	42.3	43.5	44.7	45.9	47.1	48.2	68
69	24.6	25.8	27.0	28.2	29.5	30.7	31.9	33.1	34.3	35.5	36.7	37.9	39.1	40.3	41.5	42.7	43.9	45.1	46.3	47.5	48.6	69
70	24.8	26.0	27.3	28.5	29.7	30.9	32.2	33.4	34.6	35.8	37.0	38.2	39.4	40.7	41.9	43.1	44.3	45.5	46.7	47.8	49.0	70
71	25.0	26.3	27.5	28.7	30.0	31.2	32.4	33.7	34.9	36.1	37.3	38.6	39.8	41.0	42.2	43.4	44.6	45.8	47.0	48.2	49.4	71
72	25.2	26.5	27.7	29.0	30.2	31.5	32.7	33.9	35.2	36.4	37.6	38.9	40.1	41.3	42.5	43.8	45.0	46.2	47.4	48.6	49.8	72
73	25.4	26.7	27.9	29.2	30.5	31.7	33.0	34.2	35.5	36.7	37.9	39.2	40.4	41.6	42.9	44.1	45.3	46.5	47.8	49.0	50.2	73
74	25.6	26.9	28.2	29.4	30.7	32.0	33.2	34.5	35.7	37.0	38.2	39.5	40.7	42.0	43.2	44.4	45.7	46.9	48.1	49.4	50.6	74
75	25.8	27.1	28.4	29.7	30.9	32.2	33.5	34.7	36.0	37.3	38.5	39.8	41.0	42.3	43.5	44.8	46.0	47.2	48.5	49.7	50.9	75
76	26.0	27.3	28.6	29.9	31.2	32.5	33.7	35.0	36.3	37.6	38.8	40.1	41.3	42.6	43.9	45.1	46.3	47.6	48.8	50.1	51.3	76
77	26.2	27.5	28.8	30.1	31.4	32.7	34.0	35.3	36.6	37.8	39.1	40.4	41.6	42.9	44.2	45.4	46.7	47.9	49.2	50.4	51.7	77
78	26.4	27.7	29.0	30.3	31.6	32.9	34.2	35.5	36.8	38.1	39.4	40.7	41.9	43.2	44.5	45.7	47.0	48.3	49.5	50.8	52.0	78
79	26.6	27.9	29.2	30.6	31.9	33.2	34.5	35.8	37.1	38.4	39.7	40.9	42.2	43.5	44.8	46.1	47.3	48.6	49.9	51.1	52.4	79
80	26.8	28.1	29.5	30.8	32.1	33.4	34.7	36.0	37.3	38.6	39.9	41.2	42.5	43.8	45.1	46.4	47.7	48.9	50.2	51.5	52.7	80
81	27.0	28.3	29.7	31.0	32.3	33.6	35.0	36.3	37.6	38.9	40.2	41.5	42.8	44.1	45.4	46.7	48.0	49.3	50.5	51.8	53.1	81
82	27.2	28.5	29.9	31.2	32.5	33.9	35.2	36.5	37.8	39.2	40.5	41.8	43.1	44.4	45.7	47.0	48.3	49.6	50.9	52.1	53.4	82
83	27.4	28.7	30.1	31.4	32.8	34.1	35.4	36.8	38.1	39.4	40.7	42.1	43.4	44.7	46.0	47.3	48.6	49.9	51.2	52.5	53.8	83
84	27.5	28.9	30.3	31.6	33.0	34.3	35.7	37.0	38.3	39.7	41.0	42.3	43.7	45.0	46.3	47.6	48.9	50.2	51.5	52.8	54.1	84
85	27.7	29.1	30.5	31.8	33.2	34.5	35.9	37.2	38.6	39.9	41.3	42.6	43.9	45.3	46.6	47.9	49.2	50.5	51.8	53.1	54.4	85
Years to bh	10	10	10	10	9	9	9	9	9	9	8	8	8	8	8	8	7	7	7	7	7	Years to bh

TABLE A-3. (Continued)

Cw

Age @ bh (years)	Site index: top height (m) @ breast height age 50 (Kurucz)																					Age @ bh (years)
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
	Top height (m)																					
85	27.7	29.1	30.5	31.8	33.2	34.5	35.9	37.2	38.6	39.9	41.3	42.6	43.9	45.3	46.6	47.9	49.2	50.5	51.8	53.1	54.4	85
86	27.9	29.3	30.6	32.0	33.4	34.8	36.1	37.5	38.8	40.2	41.5	42.9	44.2	45.5	46.9	48.2	49.5	50.8	52.1	53.4	54.8	86
87	28.1	29.5	30.8	32.2	33.6	35.0	36.3	37.7	39.1	40.4	41.8	43.1	44.5	45.8	47.1	48.5	49.8	51.1	52.4	53.8	55.1	87
88	28.2	29.6	31.0	32.4	33.8	35.2	36.6	37.9	39.3	40.7	42.0	43.4	44.7	46.1	47.4	48.8	50.1	51.4	52.8	54.1	55.4	88
89	28.4	29.8	31.2	32.6	34.0	35.4	36.8	38.2	39.5	40.9	42.3	43.6	45.0	46.3	47.7	49.0	50.4	51.7	53.1	54.4	55.7	89
90	28.6	30.0	31.4	32.8	34.2	35.6	37.0	38.4	39.8	41.1	42.5	43.9	45.3	46.6	48.0	49.3	50.7	52.0	53.4	54.7	56.0	90
91	28.7	30.2	31.6	33.0	34.4	35.8	37.2	38.6	40.0	41.4	42.8	44.1	45.5	46.9	48.2	49.6	51.0	52.3	53.6	55.0	56.3	91
92	28.9	30.3	31.8	33.2	34.6	36.0	37.4	38.8	40.2	41.6	43.0	44.4	45.8	47.1	48.5	49.9	51.2	52.6	53.9	55.3	56.6	92
93	29.1	30.5	31.9	33.4	34.8	36.2	37.6	39.0	40.4	41.8	43.2	44.6	46.0	47.4	48.8	50.1	51.5	52.9	54.2	55.6	56.9	93
94	29.2	30.7	32.1	33.6	35.0	36.4	37.8	39.2	40.7	42.1	43.5	44.9	46.3	47.6	49.0	50.4	51.8	53.1	54.5	55.9	57.2	94
95	29.4	30.9	32.3	33.7	35.2	36.6	38.0	39.5	40.9	42.3	43.7	45.1	46.5	47.9	49.3	50.7	52.0	53.4	54.8	56.2	57.5	95
96	29.6	31.0	32.5	33.9	35.4	36.8	38.2	39.7	41.1	42.5	43.9	45.3	46.7	48.1	49.5	50.9	52.3	53.7	55.1	56.4	57.8	96
97	29.7	31.2	32.6	34.1	35.6	37.0	38.4	39.9	41.2	42.7	44.2	45.6	47.0	48.4	49.8	51.2	52.6	54.0	55.3	56.7	58.1	97
98	29.9	31.3	32.8	34.3	35.7	37.2	38.6	40.1	41.5	42.9	44.4	45.8	47.2	48.6	50.0	51.4	52.8	54.2	55.6	57.0	58.4	98
99	30.0	31.5	33.0	34.4	35.9	37.4	38.8	40.3	41.7	43.2	44.6	46.0	47.4	48.9	50.3	51.7	53.1	54.5	55.9	57.3	58.7	99
100	30.2	31.7	33.1	34.6	36.1	37.6	39.0	40.5	41.9	43.4	44.8	46.2	47.7	49.1	50.5	51.9	53.3	54.7	56.1	57.5	58.9	100
101	30.3	31.8	33.3	34.8	36.3	37.7	39.2	40.7	42.1	43.6	45.0	46.5	47.9	49.3	50.8	52.2	53.6	55.0	56.4	57.8	59.2	101
102	30.5	32.0	33.5	35.0	36.4	37.9	39.4	40.9	42.3	43.8	45.2	46.7	48.1	49.6	51.0	52.4	53.8	55.3	56.7	58.1	59.5	102
103	30.6	32.1	33.6	35.1	36.6	38.1	39.6	41.1	42.5	44.0	45.5	46.9	48.4	49.8	51.2	52.7	54.1	55.5	56.9	58.3	59.7	103
104	30.8	32.3	33.8	35.3	36.8	38.3	39.8	41.3	42.7	44.2	45.7	47.1	48.6	50.0	51.5	52.9	54.3	55.8	57.2	58.6	60.0	104
105	30.9	32.4	33.9	35.5	37.0	38.5	40.0	41.4	42.9	44.4	45.9	47.3	48.8	50.2	51.7	53.1	54.6	56.0	57.4	58.8	60.3	105
106	31.0	32.6	34.1	35.6	37.1	38.6	40.1	41.6	43.1	44.6	46.1	47.5	49.0	50.5	51.9	53.4	54.8	56.2	57.7	59.1	60.5	106
107	31.2	32.7	34.3	35.8	37.3	38.8	40.3	41.8	43.3	44.8	46.3	47.8	49.2	50.7	52.1	53.6	55.0	56.5	57.9	59.3	60.8	107
108	31.3	32.9	34.4	35.9	37.5	39.0	40.5	42.0	43.5	45.0	46.5	48.0	49.4	50.9	52.4	53.8	55.3	56.7	58.2	59.6	61.0	108
109	31.5	33.0	34.6	36.1	37.6	39.1	40.7	42.2	43.7	45.2	46.7	48.2	49.6	51.1	52.6	54.0	55.5	57.0	58.4	59.8	61.3	109
110	31.6	33.2	34.7	36.2	37.8	39.3	40.8	42.4	43.9	45.4	46.9	48.4	49.8	51.3	52.8	54.3	55.7	57.2	58.6	60.1	61.5	110
111	31.7	33.3	34.9	36.4	37.9	39.5	41.0	42.5	44.0	45.6	47.1	48.6	50.0	51.5	53.0	54.5	56.0	57.4	58.9	60.3	61.8	111
112	31.9	33.4	35.0	36.6	38.1	39.6	41.2	42.7	44.2	45.7	47.3	48.8	50.3	51.7	53.2	54.7	56.2	57.6	59.1	60.6	62.0	112
113	32.0	33.6	35.1	36.7	38.3	39.8	41.3	42.9	44.4	45.9	47.4	48.9	50.5	51.9	53.4	54.9	56.4	57.9	59.3	60.8	62.2	113
114	32.1	33.7	35.3	36.9	38.4	40.0	41.5	43.0	44.6	46.1	47.6	49.1	50.6	52.1	53.6	55.1	56.6	58.1	59.6	61.0	62.5	114
115	32.3	33.8	35.4	37.0	38.6	40.1	41.7	43.2	44.8	46.3	47.8	49.3	50.8	52.3	53.8	55.3	56.8	58.3	59.8	61.2	62.7	115
116	32.4	34.0	35.6	37.1	38.7	40.3	41.8	43.4	44.9	46.5	48.0	49.5	51.0	52.5	54.0	55.5	57.0	58.5	60.0	61.5	62.9	116
117	32.5	34.1	35.7	37.3	38.9	40.4	42.0	43.6	45.1	46.6	48.2	49.7	51.2	52.7	54.2	55.8	57.2	58.7	60.2	61.7	63.2	117
118	32.6	34.2	35.8	37.4	39.0	40.6	42.2	43.7	45.3	46.8	48.4	49.9	51.4	52.9	54.4	56.0	57.5	58.9	60.4	61.9	63.4	118
119	32.8	34.4	36.0	37.6	39.2	40.7	42.3	43.9	45.4	47.0	48.5	50.1	51.6	53.1	54.6	56.2	57.7	59.2	60.6	62.1	63.6	119
120	32.9	34.5	36.1	37.7	39.3	40.9	42.5	44.0	45.6	47.2	48.7	50.3	51.8	53.3	54.8	56.4	57.9	59.4	60.9	62.3	63.8	120
121	33.0	34.6	36.2	37.8	39.4	41.0	42.6	44.2	45.8	47.3	48.9	50.4	52.0	53.5	55.0	56.6	58.1	59.6	61.1	62.6	64.0	121
122	33.1	34.8	36.4	38.0	39.6	41.2	42.8	44.4	45.9	47.5	49.1	50.6	52.2	53.7	55.2	56.7	58.3	59.8	61.3	62.8	64.3	122
123	33.2	34.9	36.5	38.1	39.7	41.3	42.9	44.5	46.1	47.7	49.2	50.8	52.3	53.9	55.4	56.9	58.5	60.0	61.5	63.0	64.5	123
124	33.4	35.0	36.6	38.3	39.9	41.5	43.1	44.7	46.2	47.8	49.4	51.0	52.5	54.1	55.6	57.1	58.7	60.2	61.7	63.2	64.7	124
125	33.5	35.1	36.8	38.4	40.0	41.6	43.2	44.8	46.4	48.0	49.6	51.1	52.7	54.2	55.8	57.3	58.8	60.4	61.9	63.4	64.9	125
126	33.6	35.2	36.9	38.5	40.1	41.8	43.4	45.0	46.6	48.1	49.7	51.3	52.9	54.4	56.0	57.5	59.0	60.6	62.1	63.6	65.1	126
127	33.7	35.4	37.0	38.6	40.3	41.9	43.5	45.1	46.7	48.3	49.9	51.5	53.0	54.6	56.1	57.7	59.2	60.8	62.3	63.8	65.3	127
128	33.8	35.5	37.1	38.8	40.4	42.0	43.7	45.3	46.9	48.5	50.0	51.6	53.2	54.8	56.3	57.9	59.4	60.9	62.5	64.0	65.5	128
129	33.9	35.6	37.3	38.9	40.5	42.2	43.8	45.4	47.0	48.6	50.2	51.8	53.4	54.9	56.5	58.0	59.6	61.1	62.7	64.2	65.7	129
130	34.0	35.7	37.4	39.0	40.7	42.3	43.9	45.6	47.2	48.8	50.4	51.9	53.5	55.1	56.7	58.2	59.8	61.3	62.9	64.4	65.9	130
131	34.2	35.8	37.5	39.1	40.8	42.4	44.1	45.7	47.3	48.9	50.5	52.1	53.7	55.3	56.8	58.4	60.0	61.5	63.0	64.6	66.1	131
132	34.3	35.9	37.6	39.3	40.9	42.6	44.2	45.8	47.5	49.1	50.7	52.3	53.9	55.4	57.0	58.6	60.1	61.7	63.2	64.8	66.3	132
133	34.4	36.1	37.7	39.4	41.1	42.7	44.3	46.0	47.6	49.2	50.6	52.4	54.0	55.6	57.2	58.7	60.3	61.9	63.4	64.9	66.5	133
134	34.5	36.2	37.8	39.5	41.2	42.8	44.5	46.1	47.7	49.4	51.0	52.6	54.2	55.8	57.3	58.9	60.5	62.0	63.6	65.1	66.7	134
135	34.6	36.3	38.0	39.6	41.3	43.0	44.6	46.2	47.9	49.5	51.1	52.7	54.3	55.9	57.5	59.1	60.7	62.2	63.8	65.3	66.9	135
136	34.7	36.4	38.1	39.8	41.4	43.1	44.7	46.4	48.0	49.7	51.3	52.9	54.5	56.1	57.7	59.3	60.8	62.4	63.9	65.5	67.0	136
137	34.8	36.5	38.2	39.9	41.5	43.2	44.9	46.5	48.2	49.8	51.4	53.0	54.6	56.2	57.8	59.4	61.0	62.6	64.1	65.7	67.2	137
138	34.9	36.6	38.3	40.0	41.7	43.3	45.0	46.7	48.3	49.9	51.6	53.2	54.8	56.4	58.0	59.6	61.2	62.7	64.3	65.9	67.4	138
139	35.0	36.7	38.4	40.1	41.8	43.5	45.1	46.8	48.4	50.1	51.7	53.3	54.9	56.6	58.2	59.7	61.3	62.9	64.5	66.0	67.6	139
140	35.1	36.8	38.5	40.2	41.9	43.6	45.3	46.9	48.6	50.2	51.8	53.5	55.1	56.7	58.3	59.9	61.5	63.1	64.6	66.2	67.8	140
141	35.2	36.9	38.6	40.3	42.0	43.7	45.4	47.0	48.7	50.3	52.0	53.6	55.2	56.9	58.5	60.1	61.7	63.2	64.8	66.4	67.9	141
142	35.3	37.0	38.7	40.4	42.1	43.8	45.5	47.2	48.8	50.5	52.1	53.8	55.4	57.0	58.6	60.2	61.8	63.4	65.0	66.5	68.1	142
143	35.4	37.1	38.8	40.5	42.2	43.9	45.6	47.3	49.0	50.6	52.3	53.9	55.5	57.2	58.8	60.4	62.0	63.6	65.1	66.7	68.3	143
144	35.5	37.2	38.9	40.7	42.4	44.1	45.7	47.4	49.1	50.7	52.4	54.0	55.7	57.3	58.9	60.5	62.1	63.7	65.3	66.9	68.4	144
145	35.6	37.3	39.0	40.8	42.5	44.2	45.9	47.5	49.2	50.9	52.5	54.2	55.8	57.4	59.1	60.7	62.3	63.9	65.5	67.0	68.6	145
146	35.7	37.4	39.1	40.9	42.6	44.3	46.0	47.7	49.3	51.0	52.7	54.3	56.0	57.6	59.2	60.8	62.4	64.0	65.6	67.2	68.8	146
147	35.8	37.5	39.2	41.0	42.7	44.4	46.1	47.8	49.5	51.1	52.8	54.5	56.1	57.7	59.4	61.0	62.6	64.2	65.8	67.4	68.9	147
148	35.9	37.6	39.3	41.1	42.8	44.5	46.2	47.9	49.6	51.3	52.9	54.6	56.2	57.9	59.5	61.1	62.7	64.3	65.9	67.5	69.1	148
149	35.9	37.7	39.4	41.2	42.9	44.6	46.3	48.0	49.7	51.4	53.1	54.7	56.4	58.0	59.6	61.3	62.9	64.5	66.1	67.7	69.3	149
150	36.0	37.8	39.5	41.3	43.0	44.7	46.4	48.1	49.8	51.5	53.2	54.9	56.5	58.2	59.8	61.4	63.0	64.6	66.2	67.8	69.4	150
Years to bh	10	10	10	10	9	9	9	9	9	9	8	8	8	8	8	8	7	7	7	7	7	Years to bh

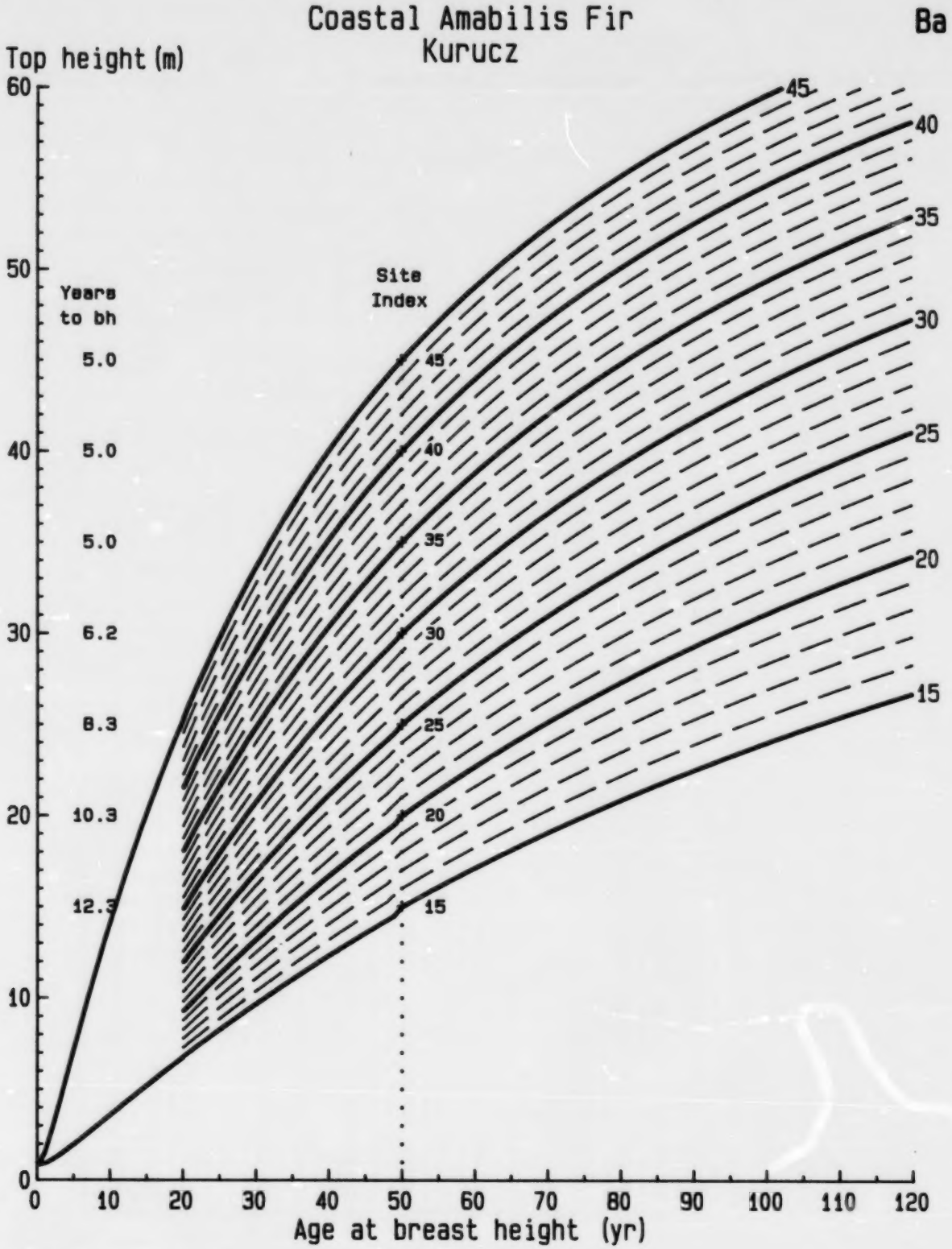

FIGURE A-4. Site index curves for second-growth coastal amabilis fir.

TABLE A-4. Site index table for second-growth coastal amabilis fir

Ba

Age @ bh (years)	Site index: top height (m) @ breast height age 50 (Kurucz)																					Age @ bh (years)
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
	Top height (m) ◄																					
20	9.3	9.8	10.3	10.9	11.4	12.0	12.5	13.1	13.7	14.3	14.9	15.5	16.1	16.7	17.4	18.0	18.7	19.4	20.1	20.8	21.5	20
21	9.7	10.2	10.8	11.3	11.9	12.5	13.1	13.7	14.3	14.9	15.5	16.1	16.8	17.4	18.1	18.8	19.5	20.2	20.9	21.6	22.4	21
22	10.1	10.7	11.2	11.8	12.4	13.0	13.6	14.2	14.8	15.5	16.1	16.8	17.4	18.1	18.8	19.5	20.2	20.9	21.7	22.4	23.2	22
23	10.5	11.1	11.7	12.3	12.9	13.5	14.1	14.8	15.4	16.1	16.7	17.4	18.1	18.8	19.5	20.2	20.9	21.7	22.4	23.2	24.0	23
24	10.9	11.5	12.1	12.7	13.4	14.0	14.7	15.3	16.0	16.7	17.3	18.0	18.7	19.5	20.2	20.9	21.7	22.4	23.2	24.0	24.8	24
25	11.3	11.9	12.6	13.2	13.8	14.5	15.2	15.9	16.5	17.2	17.9	18.7	19.4	20.1	20.8	21.6	22.4	23.1	23.9	24.7	25.5	25
26	11.7	12.3	13.0	13.6	14.3	15.0	15.7	16.4	17.1	17.8	18.5	19.3	20.0	20.7	21.5	22.3	23.1	23.8	24.6	25.5	26.3	26
27	12.1	12.7	13.4	14.1	14.8	15.5	16.2	16.9	17.6	18.4	19.1	19.8	20.6	21.4	22.1	22.9	23.7	24.5	25.3	26.2	27.0	27
28	12.4	13.1	13.8	14.5	15.2	16.0	16.7	17.4	18.1	18.9	19.7	20.4	21.2	22.0	22.8	23.6	24.4	25.2	26.0	26.9	27.7	28
29	12.8	13.5	14.2	15.0	15.7	16.4	17.2	17.9	18.7	19.4	20.2	21.0	21.8	22.6	23.4	24.2	25.0	25.9	26.7	27.6	28.4	29
30	13.2	13.9	14.7	15.4	16.1	16.9	17.6	18.4	19.2	20.0	20.7	21.5	22.4	23.2	24.0	24.8	25.7	26.5	27.4	28.2	29.1	30
31	13.6	14.3	15.1	15.8	16.6	17.3	18.1	18.9	19.7	20.5	21.3	22.1	22.9	23.7	24.6	25.4	26.3	27.1	28.0	28.9	29.8	31
32	13.9	14.7	15.5	16.2	17.0	17.8	18.6	19.4	20.2	21.0	21.8	22.6	23.5	24.3	25.2	26.0	26.9	27.7	28.6	29.5	30.4	32
33	14.3	15.1	15.8	16.6	17.4	18.2	19.0	19.8	20.7	21.5	22.3	23.2	24.0	24.9	25.7	26.6	27.5	28.4	29.2	30.1	31.0	33
34	14.6	15.4	16.2	17.0	17.8	18.7	19.5	20.3	21.1	22.0	22.8	23.7	24.5	25.4	26.3	27.2	28.1	28.9	29.8	30.8	31.7	34
35	15.0	15.8	16.6	17.4	18.3	19.1	19.9	20.8	21.6	22.5	23.3	24.2	25.1	25.9	26.8	27.7	28.6	29.5	30.4	31.4	32.3	35
36	15.3	16.2	17.0	17.8	18.7	19.5	20.4	21.2	22.1	22.9	23.8	24.7	25.6	26.5	27.4	28.3	29.2	30.1	31.0	31.9	32.9	36
37	15.7	16.5	17.4	18.2	19.1	19.9	20.8	21.7	22.5	23.4	24.3	25.2	26.1	27.0	27.9	28.8	29.7	30.7	31.6	32.5	33.5	37
38	16.0	16.9	17.7	18.6	19.5	20.3	21.2	22.1	23.0	23.9	24.8	25.7	26.6	27.5	28.4	29.3	30.3	31.2	32.1	33.1	34.0	38
39	16.4	17.2	18.1	19.0	19.9	20.8	21.6	22.5	23.4	24.3	25.2	26.2	27.1	28.0	28.9	29.9	30.8	31.7	32.7	33.6	34.6	39
40	16.7	17.6	18.5	19.4	20.3	21.2	22.1	23.0	23.9	24.8	25.7	26.6	27.6	28.5	29.4	30.4	31.3	32.3	33.2	34.2	35.1	40
41	17.0	17.9	18.8	19.7	20.6	21.5	22.5	23.4	24.3	25.2	26.2	27.1	28.0	29.0	29.9	30.9	31.8	32.8	33.7	34.7	35.7	41
42	17.3	18.3	19.2	20.1	21.0	21.9	22.9	23.8	24.7	25.7	26.6	27.6	28.5	29.5	30.4	31.4	32.3	33.3	34.3	35.2	36.2	42
43	17.7	18.6	19.5	20.5	21.4	22.3	23.3	24.2	25.1	26.1	27.0	28.0	29.0	29.9	30.9	31.8	32.8	33.8	34.8	35.7	36.7	43
44	18.0	18.9	19.9	20.8	21.8	22.7	23.7	24.6	25.6	26.5	27.5	28.4	29.4	30.4	31.4	32.3	33.3	34.3	35.3	36.2	37.2	44
45	18.3	19.2	20.2	21.2	22.1	23.1	24.0	25.0	26.0	26.9	27.9	28.9	29.9	30.8	31.8	32.8	33.8	34.8	35.7	36.7	37.7	45
46	18.6	19.6	20.5	21.5	22.5	23.4	24.4	25.4	26.4	27.3	28.3	29.3	30.3	31.3	32.3	33.3	34.2	35.2	36.2	37.2	38.2	46
47	18.9	19.9	20.9	21.8	22.8	23.8	24.8	25.8	26.8	27.8	28.7	29.7	30.7	31.7	32.7	33.7	34.7	35.7	36.7	37.7	38.7	47
48	19.2	20.2	21.2	22.2	23.2	24.2	25.2	26.2	27.2	28.2	29.1	30.1	31.1	32.1	33.1	34.1	35.2	36.1	37.1	38.1	39.1	48
49	19.5	20.5	21.5	22.5	23.5	24.5	25.5	26.5	27.5	28.5	29.6	30.6	31.6	32.6	33.6	34.6	35.6	36.6	37.6	38.6	39.6	49
50	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	50
51	20.3	21.3	22.3	23.3	24.3	25.3	26.3	27.4	28.4	29.4	30.4	31.4	32.4	33.4	34.4	35.4	36.4	37.4	38.4	39.4	40.4	51
52	20.6	21.6	22.6	23.6	24.6	25.7	26.7	27.7	28.7	29.7	30.7	31.8	32.8	33.8	34.8	35.8	36.8	37.8	38.8	39.8	40.8	52
53	20.8	21.9	22.9	23.9	25.0	26.0	27.0	28.0	29.1	30.1	31.1	32.1	33.2	34.2	35.2	36.2	37.2	38.2	39.2	40.3	41.3	53
54	21.1	22.2	23.2	24.2	25.3	26.3	27.4	28.4	29.4	30.4	31.5	32.5	33.5	34.5	35.6	36.6	37.6	38.6	39.6	40.7	41.7	54
55	21.4	22.4	23.5	24.5	25.6	26.6	27.7	28.7	29.8	30.8	31.8	32.9	33.9	34.9	35.9	37.0	38.0	39.0	40.0	41.0	42.1	55
56	21.7	22.7	23.8	24.8	25.9	26.9	28.0	29.0	30.1	31.1	32.2	33.2	34.3	35.3	36.3	37.3	38.4	39.4	40.4	41.4	42.5	56
57	21.9	23.0	24.1	25.1	26.2	27.3	28.3	29.4	30.4	31.5	32.5	33.6	34.6	35.6	36.7	37.7	38.7	39.8	40.8	41.8	42.8	57
58	22.2	23.3	24.3	25.4	26.5	27.6	28.6	29.7	30.8	31.8	32.9	33.9	35.0	36.0	37.0	38.1	39.1	40.1	41.2	42.2	43.2	58
59	22.4	23.5	24.6	25.7	26.8	27.9	28.9	30.0	31.1	32.1	33.2	34.3	35.3	36.4	37.4	38.4	39.5	40.5	41.5	42.6	43.6	59
60	22.7	23.8	24.9	26.0	27.1	28.2	29.2	30.3	31.4	32.5	33.5	34.6	35.6	36.7	37.7	38.8	39.8	40.9	41.9	42.9	43.9	60
61	23.0	24.1	25.2	26.3	27.4	28.5	29.5	30.6	31.7	32.8	33.9	34.9	36.0	37.0	38.1	39.1	40.2	41.2	42.2	43.3	44.3	61
62	23.2	24.3	25.4	26.6	27.7	28.8	29.8	30.9	32.0	33.1	34.2	35.2	36.3	37.4	38.4	39.5	40.5	41.6	42.6	43.6	44.7	62
63	23.5	24.6	25.7	26.8	27.9	29.0	30.1	31.2	32.3	33.4	34.5	35.6	36.6	37.7	38.8	39.8	40.9	41.9	42.9	44.0	45.0	63
64	23.7	24.8	26.0	27.1	28.2	29.3	30.4	31.5	32.6	33.7	34.8	35.9	37.0	38.0	39.1	40.1	41.2	42.2	43.3	44.3	45.3	64
65	23.9	25.1	26.2	27.4	28.5	29.6	30.7	31.8	32.9	34.0	35.1	36.2	37.3	38.3	39.4	40.5	41.5	42.6	43.6	44.6	45.7	65
66	24.2	25.3	26.5	27.6	28.8	29.9	31.0	32.1	33.2	34.3	35.4	36.5	37.6	38.7	39.7	40.8	41.8	42.9	43.9	45.0	46.0	66
67	24.4	25.6	26.7	27.9	29.0	30.2	31.3	32.4	33.5	34.6	35.7	36.8	37.9	39.0	40.0	41.1	42.2	43.2	44.3	45.3	46.3	67
68	24.7	25.8	27.0	28.1	29.3	30.4	31.6	32.7	33.8	34.9	36.0	37.1	38.2	39.3	40.3	41.4	42.5	43.5	44.6	45.6	46.6	68
69	24.9	26.1	27.2	28.4	29.6	30.7	31.8	33.0	34.1	35.2	36.3	37.4	38.5	39.6	40.6	41.7	42.8	43.8	44.9	45.9	47.0	69
70	25.1	26.3	27.5	28.7	29.8	31.0	32.1	33.2	34.4	35.5	36.6	37.7	38.8	39.9	40.9	42.0	43.1	44.1	45.2	46.2	47.3	70
71	25.4	26.5	27.7	28.9	30.1	31.2	32.4	33.5	34.6	35.8	36.9	38.0	39.1	40.2	41.2	42.3	43.4	44.4	45.5	46.5	47.6	71
72	25.6	26.8	28.0	29.1	30.3	31.5	32.6	33.8	34.9	36.0	37.1	38.3	39.4	40.4	41.5	42.6	43.7	44.7	45.8	46.8	47.9	72
73	25.8	27.0	28.2	29.4	30.6	31.7	32.9	34.0	35.2	36.3	37.4	38.5	39.6	40.7	41.8	42.9	44.0	45.0	46.1	47.1	48.2	73
74	26.0	27.2	28.4	29.6	30.8	32.0	33.1	34.3	35.4	36.6	37.7	38.8	39.9	41.0	42.1	43.2	44.2	45.3	46.4	47.4	48.4	74
75	26.2	27.5	28.7	29.9	31.1	32.2	33.4	34.6	35.7	36.8	38.0	39.1	40.2	41.3	42.4	43.5	44.5	45.6	46.6	47.7	48.7	75
76	26.5	27.7	28.9	30.1	31.3	32.5	33.6	34.8	36.0	37.1	38.2	39.3	40.5	41.6	42.7	43.7	44.8	45.9	46.9	48.0	49.0	76
77	26.7	27.9	29.1	30.3	31.5	32.7	33.9	35.1	36.2	37.4	38.5	39.6	40.7	41.8	42.9	44.0	45.1	46.1	47.2	48.2	49.3	77
78	26.9	28.1	29.4	30.6	31.8	33.0	34.1	35.3	36.5	37.6	38.8	39.9	41.0	42.1	43.2	44.3	45.3	46.4	47.5	48.5	49.6	78
79	27.1	28.3	29.6	30.8	32.0	33.2	34.4	35.6	36.7	37.9	39.0	40.1	41.3	42.4	43.5	44.5	45.6	46.7	47.7	48.8	49.8	79
80	27.3	28.6	29.8	31.0	32.2	33.4	34.6	35.8	37.0	38.1	39.3	40.4	41.5	42.6	43.7	44.8	45.9	46.9	48.0	49.0	50.1	80
81	27.5	28.8	30.0	31.2	32.5	33.7	34.9	36.0	37.2	38.4	39.5	40.6	41.8	42.9	44.0	45.1	46.1	47.2	48.3	49.3	50.3	81
82	27.7	29.0	30.2	31.5	32.7	33.9	35.1	36.3	37.4	38.6	39.8	40.9	42.0	43.1	44.2	45.3	46.4	47.5	48.5	49.6	50.6	82
83	27.9	29.2	30.4	31.7	32.9	34.1	35.3	36.5	37.7	38.8	40.0	41.1	42.3	43.4	44.5	45.6	46.6	47.7	48.8	49.8	50.8	83
84	28.1	29.4	30.7	31.9	33.1	34.4	35.6	36.7	37.9	39.1	40.2	41.4	42.5	43.6	44.7	45.8	46.9	48.0	49.0	50.1	51.1	84
85	28.3	29.6	30.9	32.1	33.4	34.6	35.8	37.0	38.2	39.3	40.5	41.6	42.7	43.9	45.0	46.1	47.1	48.2	49.3	50.3	51.3	85
Years to bh	10	10	10	9	9	8	8	7	7	7	6	6	5	5	5	5	5	5	5	5	5	Years to bh

TABLE A-4. (Continued)

Ba

Age @ bh (years)	Site index: top height (m) @ breast height age 50 (kurucz)																					Age @ bh (years)
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
	Top height (m) ◄																					
85	28.3	29.6	30.9	32.1	33.4	34.6	35.8	37.0	38.2	39.3	40.5	41.6	42.7	43.9	45.0	46.1	47.1	48.2	49.3	50.3	51.3	85
86	28.5	29.8	31.1	32.3	33.6	34.8	36.0	37.2	38.4	39.6	40.7	41.9	43.0	44.1	45.2	46.3	47.4	48.4	49.5	50.5	51.6	86
87	28.7	30.0	31.3	32.5	33.8	35.0	36.2	37.4	38.6	39.8	40.9	42.1	43.2	44.3	45.4	46.5	47.6	48.7	49.7	50.8	51.8	87
88	28.9	30.2	31.5	32.7	34.0	35.2	36.4	37.6	38.8	40.0	41.2	42.3	43.4	44.6	45.7	46.8	47.8	48.9	50.0	51.0	52.1	88
89	29.1	30.4	31.7	33.0	34.2	35.4	36.7	37.9	39.1	40.2	41.4	42.5	43.7	44.8	45.9	47.0	48.1	49.2	50.2	51.3	52.3	89
90	29.3	30.6	31.9	33.2	34.4	35.7	36.9	38.1	39.3	40.5	41.6	42.8	43.9	45.0	46.1	47.2	48.3	49.4	50.4	51.5	52.5	90
91	29.5	30.8	32.1	33.4	34.6	35.9	37.1	38.3	39.5	40.7	41.8	43.0	44.1	45.2	46.4	47.5	48.5	49.6	50.7	51.7	52.7	91
92	29.7	31.0	32.3	33.6	34.8	36.1	37.3	38.5	39.7	40.9	42.1	43.2	44.3	45.5	46.6	47.7	48.8	49.8	50.9	51.9	53.0	92
93	29.9	31.2	32.5	33.8	35.0	36.3	37.5	38.7	39.9	41.1	42.3	43.4	44.6	45.7	46.8	47.9	49.0	50.0	51.1	52.1	53.2	93
94	30.0	31.4	32.7	34.0	35.2	36.5	37.7	38.9	40.1	41.3	42.5	43.6	44.8	45.9	47.0	48.1	49.2	50.3	51.3	52.4	53.4	94
95	30.2	31.5	32.9	34.1	35.4	36.7	37.9	39.1	40.3	41.5	42.7	43.9	45.0	46.1	47.2	48.3	49.4	50.5	51.5	52.6	53.6	95
96	30.4	31.7	33.0	34.3	35.6	36.9	38.1	39.3	40.5	41.7	42.9	44.1	45.2	46.3	47.4	48.5	49.6	50.7	51.7	52.8	53.8	96
97	30.6	31.9	33.2	34.5	35.8	37.1	38.3	39.5	40.7	41.9	43.1	44.3	45.4	46.5	47.7	48.8	49.8	50.9	52.0	53.0	54.0	97
98	30.7	32.1	33.4	34.7	36.0	37.3	38.5	39.7	40.9	42.1	43.3	44.5	45.6	46.7	47.9	49.0	50.0	51.1	52.2	53.2	54.2	98
99	30.9	32.3	33.6	34.9	36.2	37.5	38.7	39.9	41.1	42.3	43.5	44.7	45.8	47.0	48.1	49.2	50.2	51.3	52.4	53.4	54.4	99
100	31.1	32.4	33.8	35.1	36.4	37.6	38.9	40.1	41.3	42.5	43.7	44.9	46.0	47.2	48.3	49.4	50.4	51.5	52.6	53.6	54.6	100
101	31.3	32.6	34.0	35.3	36.6	37.8	39.1	40.3	41.5	42.7	43.9	45.1	46.2	47.4	48.5	49.6	50.6	51.7	52.8	53.8	54.8	101
102	31.4	32.8	34.1	35.4	36.7	38.0	39.3	40.5	41.7	42.9	44.1	45.3	46.4	47.5	48.7	49.8	50.8	51.9	53.0	54.0	55.0	102
103	31.6	33.0	34.3	35.6	36.9	38.2	39.5	40.7	41.9	43.1	44.3	45.5	46.6	47.7	48.9	50.0	51.0	52.1	53.2	54.2	55.2	103
104	31.8	33.1	34.5	35.8	37.1	38.4	39.6	40.9	42.1	43.3	44.5	45.7	46.8	47.9	49.0	50.1	51.2	52.3	53.3	54.4	55.4	104
105	31.9	33.3	34.7	36.0	37.3	38.6	39.8	41.1	42.3	43.5	44.7	45.8	47.0	48.1	49.2	50.3	51.4	52.5	53.5	54.6	55.6	105
106	32.1	33.5	34.8	36.2	37.5	38.7	40.0	41.3	42.5	43.7	44.9	46.0	47.2	48.3	49.4	50.5	51.6	52.7	53.7	54.8	55.8	106
107	32.3	33.6	35.0	36.3	37.6	38.9	40.2	41.4	42.7	43.9	45.1	46.2	47.4	48.5	49.6	50.7	51.8	52.9	53.9	54.9	56.0	107
108	32.4	33.8	35.2	36.5	37.8	39.1	40.4	41.6	42.8	44.0	45.2	46.4	47.6	48.7	49.8	50.9	52.0	53.0	54.1	55.1	56.1	108
109	32.6	34.0	35.3	36.7	38.0	39.3	40.5	41.8	43.0	44.2	45.4	46.6	47.7	48.9	50.0	51.1	52.2	53.2	54.3	55.3	56.3	109
110	32.7	34.1	35.5	36.8	38.1	39.4	40.7	42.0	43.2	44.4	45.6	46.8	47.9	49.0	50.2	51.3	52.3	53.4	54.4	55.5	56.5	110
111	32.9	34.3	35.7	37.0	38.3	39.6	40.9	42.1	43.4	44.6	45.8	46.9	48.1	49.2	50.3	51.4	52.5	53.6	54.6	55.6	56.7	111
112	33.1	34.5	35.8	37.2	38.5	39.8	41.1	42.3	43.5	44.8	45.9	47.1	48.3	49.4	50.5	51.6	52.7	53.7	54.8	55.8	56.8	112
113	33.2	34.6	36.0	37.3	38.7	40.0	41.2	42.5	43.7	44.9	46.1	47.3	48.4	49.6	50.7	51.8	52.9	53.9	55.0	56.0	57.0	113
114	33.4	34.8	36.1	37.5	38.8	40.1	41.4	42.7	43.9	45.1	46.3	47.5	48.6	49.7	50.9	52.0	53.0	54.1	55.1	56.2	57.2	114
115	33.5	34.9	36.3	37.6	39.0	40.3	41.6	42.8	44.1	45.3	46.5	47.6	48.8	49.9	51.0	52.1	53.2	54.3	55.3	56.3	57.3	115
116	33.7	35.1	36.5	37.8	39.1	40.4	41.7	43.0	44.2	45.4	46.6	47.8	48.9	50.1	51.2	52.3	53.4	54.4	55.5	56.5	57.5	116
117	33.8	35.2	36.6	38.0	39.3	40.6	41.9	43.1	44.4	45.6	46.8	48.0	49.1	50.2	51.4	52.5	53.5	54.6	55.6	56.7	57.7	117
118	34.0	35.4	36.8	38.1	39.5	40.8	42.0	43.3	44.5	45.8	47.0	48.1	49.3	50.4	51.5	52.6	53.7	54.8	55.8	56.8	57.8	118
119	34.1	35.5	36.9	38.3	39.6	40.9	42.2	43.5	44.7	45.9	47.1	48.3	49.4	50.6	51.7	52.8	53.9	54.9	56.0	57.0	58.0	119
120	34.3	35.7	37.1	38.4	39.8	41.1	42.4	43.6	44.9	46.1	47.3	48.5	49.6	50.7	51.8	52.9	54.0	55.1	56.1	57.1	58.1	120
121	34.4	35.8	37.2	38.6	39.9	41.2	42.5	43.8	45.0	46.2	47.4	48.6	49.8	50.9	52.0	53.1	54.2	55.2	56.3	57.3	58.3	121
122	34.5	36.0	37.4	38.7	40.1	41.4	42.7	43.9	45.2	46.4	47.6	48.8	49.9	51.1	52.2	53.3	54.3	55.4	56.4	57.4	58.4	122
123	34.7	36.1	37.5	38.9	40.2	41.5	42.8	44.1	45.3	46.6	47.8	48.9	50.1	51.2	52.3	53.4	54.5	55.5	56.6	57.6	58.6	123
124	34.8	36.3	37.7	39.0	40.4	41.7	43.0	44.3	45.5	46.7	47.9	49.1	50.2	51.4	52.5	53.6	54.6	55.7	56.7	57.7	58.7	124
125	35.0	36.4	37.8	39.2	40.5	41.8	43.1	44.4	45.6	46.9	48.1	49.2	50.4	51.5	52.6	53.7	54.8	55.8	56.9	57.9	58.9	125
126	35.1	36.5	37.9	39.3	40.7	42.0	43.3	44.6	45.8	47.0	48.2	49.4	50.5	51.7	52.8	53.9	54.9	56.0	57.0	58.0	59.0	126
127	35.2	36.7	38.1	39.5	40.8	42.1	43.4	44.7	45.9	47.2	48.4	49.5	50.7	51.8	52.9	54.0	55.1	56.1	57.2	58.2	59.2	127
128	35.4	36.8	38.2	39.6	41.0	42.3	43.6	44.8	46.1	47.3	48.5	49.7	50.8	52.0	53.1	54.2	55.2	56.3	57.3	58.3	59.3	128
129	35.5	37.0	38.4	39.7	41.1	42.4	43.7	45.0	46.2	47.5	48.7	49.8	51.0	52.1	53.2	54.3	55.4	56.4	57.5	58.5	59.5	129
130	35.6	37.1	38.5	39.9	41.2	42.6	43.9	45.1	46.4	47.6	48.8	50.0	51.1	52.3	53.4	54.5	55.5	56.6	57.6	58.6	59.6	130
131	35.8	37.2	38.6	40.0	41.4	42.7	44.0	45.3	46.5	47.8	49.0	50.1	51.3	52.4	53.5	54.6	55.7	56.7	57.7	58.7	59.7	131
132	35.9	37.4	38.8	40.2	41.5	42.9	44.2	45.4	46.7	47.9	49.1	50.3	51.4	52.5	53.7	54.7	55.8	56.9	57.9	58.9	59.9	132
133	36.0	37.5	38.9	40.3	41.7	43.0	44.3	45.6	46.8	48.0	49.2	50.4	51.6	52.7	53.8	54.9	55.9	57.0	58.0	59.0	60.0	133
134	36.2	37.6	39.0	40.4	41.8	43.1	44.4	45.7	47.0	48.2	49.4	50.6	51.7	52.8	53.9	55.0	56.1	57.1	58.2	59.2	60.1	134
135	36.3	37.8	39.2	40.6	41.9	43.3	44.6	45.8	47.1	48.3	49.5	50.7	51.8	53.0	54.1	55.2	56.2	57.3	58.3	59.3	60.3	135
136	36.4	37.9	39.3	40.7	42.1	43.4	44.7	46.0	47.2	48.5	49.7	50.8	52.0	53.1	54.2	55.3	56.4	57.4	58.4	59.4	60.4	136
137	36.6	38.0	39.4	40.8	42.2	43.5	44.8	46.1	47.4	48.6	49.8	51.0	52.1	53.2	54.3	55.4	56.5	57.5	58.6	59.6	60.5	137
138	36.7	38.1	39.6	41.0	42.3	43.7	45.0	46.3	47.5	48.7	49.9	51.1	52.3	53.4	54.5	55.6	56.6	57.7	58.7	59.7	60.7	138
139	36.8	38.3	39.7	41.1	42.5	43.8	45.1	46.4	47.6	48.9	50.1	51.2	52.4	53.5	54.6	55.7	56.8	57.8	58.8	59.8	60.8	139
140	36.9	38.4	39.8	41.2	42.6	43.9	45.2	46.5	47.8	49.0	50.2	51.4	52.5	53.6	54.7	55.8	56.9	57.9	58.9	59.9	60.9	140
141	37.1	38.5	40.0	41.4	42.7	44.1	45.4	46.7	47.9	49.1	50.3	51.5	52.6	53.8	54.9	56.0	57.0	58.0	59.1	60.1	61.0	141
142	37.2	38.7	40.1	41.5	42.9	44.2	45.5	46.8	48.0	49.3	50.5	51.6	52.8	53.9	55.0	56.1	57.1	58.2	59.2	60.2	61.2	142
143	37.3	38.8	40.2	41.6	43.0	44.3	45.6	46.9	48.2	49.4	50.6	51.8	52.9	54.0	55.1	56.2	57.3	58.3	59.3	60.3	61.3	143
144	37.4	38.9	40.3	41.7	43.1	44.5	45.8	47.0	48.3	49.5	50.7	51.9	53.0	54.2	55.3	56.3	57.4	58.4	59.4	60.4	61.4	144
145	37.5	39.0	40.5	41.9	43.2	44.6	45.9	47.2	48.4	49.6	50.8	52.0	53.2	54.3	55.4	56.5	57.5	58.5	59.6	60.6	61.5	145
146	37.7	39.1	40.6	42.0	43.4	44.7	46.0	47.3	48.5	49.8	51.0	52.1	53.3	54.4	55.5	56.6	57.6	58.7	59.7	60.7	61.6	146
147	37.8	39.3	40.7	42.1	43.5	44.8	46.1	47.4	48.7	49.9	51.1	52.3	53.4	54.5	55.6	56.7	57.8	58.8	59.8	60.8	61.8	147
148	37.9	39.4	40.8	42.2	43.6	44.9	46.3	47.5	48.8	50.0	51.2	52.4	53.5	54.7	55.8	56.8	57.9	58.9	59.9	60.9	61.9	148
149	38.0	39.5	40.9	42.4	43.7	45.1	46.4	47.7	48.9	50.1	51.3	52.5	53.7	54.8	55.9	56.9	58.0	59.0	60.0	61.0	62.0	149
150	38.1	39.6	41.1	42.5	43.8	45.2	46.5	47.8	49.0	50.3	51.5	52.6	53.8	54.9	56.0	57.1	58.1	59.1	60.2	61.1	62.1	150
Years to bh	10	10	10	9	9	8	8	7	7	7	6	6	5	5	5	5	5	5	5	5	5	Years to bh

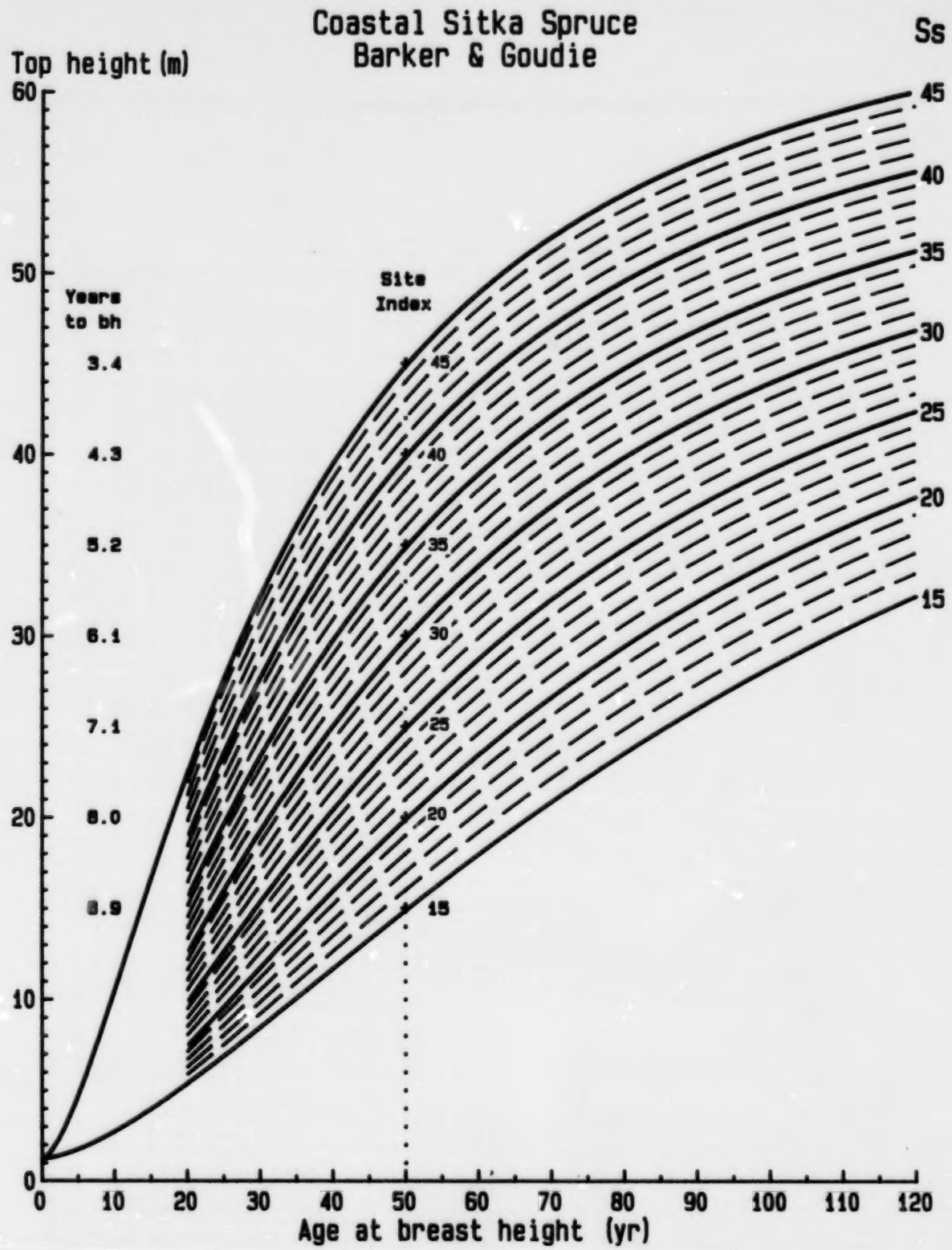

FIGURE A-5. Site index curves for second-growth coastal Sitka spruce.

TABLE A-5. Site index table for second-growth coastal Sitka spruce

Ss

Age @ bh (years)	Site index: top height (m) @ breast height age 50 (Barker & Goudie)																					Age @ bh (years)
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
	Top height (m)																					
20	7.6	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.6	12.2	12.7	13.3	13.9	14.5	15.1	15.8	16.4	17.1	17.7	18.4	19.1	20
21	8.0	8.5	9.0	9.5	10.0	10.5	11.1	11.7	12.2	12.8	13.4	14.0	14.7	15.3	15.9	16.6	17.3	18.0	18.6	19.3	20.1	21
22	8.4	8.9	9.4	10.0	10.5	11.1	11.7	12.3	12.9	13.5	14.1	14.7	15.4	16.1	16.7	17.4	18.1	18.8	19.5	20.3	21.0	22
23	8.8	9.4	9.9	10.5	11.1	11.7	12.3	12.9	13.5	14.1	14.8	15.5	16.1	16.8	17.5	18.2	18.9	19.7	20.4	21.2	21.9	23
24	9.3	9.8	10.4	11.0	11.6	12.2	12.8	13.5	14.1	14.8	15.5	16.2	16.9	17.6	18.3	19.0	19.8	20.5	21.3	22.1	22.8	24
25	9.7	10.3	10.9	11.5	12.1	12.8	13.4	14.1	14.7	15.4	16.1	16.8	17.6	18.3	19.1	19.8	20.6	21.3	22.1	22.9	23.7	25
26	10.1	10.7	11.4	12.0	12.6	13.3	14.0	14.7	15.4	16.1	16.8	17.5	18.3	19.0	19.8	20.6	21.4	22.2	23.0	23.8	24.6	26
27	10.6	11.2	11.8	12.5	13.2	13.9	14.6	15.3	16.0	16.7	17.5	18.2	19.0	19.8	20.5	21.3	22.1	22.9	23.8	24.6	25.4	27
28	11.0	11.7	12.3	13.0	13.7	14.4	15.1	15.8	16.6	17.3	18.1	18.9	19.7	20.5	21.3	22.1	22.9	23.7	24.6	25.4	26.3	28
29	11.4	12.1	12.8	13.5	14.2	14.9	15.7	16.4	17.2	18.0	18.7	19.5	20.3	21.2	22.0	22.8	23.6	24.5	25.3	26.2	27.1	29
30	11.9	12.6	13.3	14.0	14.7	15.5	16.2	17.0	17.8	18.6	19.4	20.2	21.0	21.8	22.7	23.5	24.4	25.2	26.1	27.0	27.9	30
31	12.3	13.0	13.7	14.5	15.2	16.0	16.8	17.6	18.4	19.2	20.0	20.8	21.7	22.5	23.4	24.2	25.1	26.0	26.9	27.7	28.6	31
32	12.7	13.5	14.2	15.0	15.7	16.5	17.3	18.1	19.0	19.8	20.6	21.5	22.3	23.2	24.0	24.9	25.8	26.7	27.6	28.5	29.4	32
33	13.1	13.9	14.7	15.5	16.2	17.1	17.9	18.7	19.5	20.4	21.2	22.1	22.9	23.8	24.7	25.6	26.5	27.4	28.3	29.2	30.1	33
34	13.6	14.3	15.1	15.9	16.7	17.6	18.4	19.2	20.1	20.9	21.8	22.7	23.6	24.4	25.3	26.2	27.2	28.1	29.0	29.9	30.8	34
35	14.0	14.8	15.6	16.4	17.2	18.1	18.9	19.8	20.6	21.5	22.4	23.3	24.2	25.1	26.0	26.9	27.8	28.7	29.7	30.6	31.5	35
36	14.4	15.2	16.1	16.9	17.7	18.6	19.4	20.3	21.2	22.1	23.0	23.9	24.8	25.7	26.6	27.5	28.4	29.4	30.3	31.3	32.2	36
37	14.8	15.7	16.5	17.4	18.2	19.1	20.0	20.8	21.7	22.6	23.5	24.4	25.4	26.3	27.2	28.1	29.1	30.0	31.0	31.9	32.9	37
38	15.3	16.1	17.0	17.8	18.7	19.6	20.5	21.4	22.3	23.2	24.1	25.0	25.9	26.9	27.8	28.7	29.7	30.6	31.6	32.5	33.5	38
39	15.7	16.5	17.4	18.3	19.2	20.1	21.0	21.9	22.8	23.7	24.6	25.6	26.5	27.4	28.4	29.3	30.3	31.2	32.2	33.2	34.1	39
40	16.1	17.0	17.8	18.7	19.6	20.5	21.5	22.4	23.3	24.2	25.2	26.1	27.1	28.0	29.0	29.9	30.9	31.8	32.8	33.8	34.7	40
41	16.5	17.4	18.3	19.2	20.1	21.0	21.9	22.9	23.8	24.7	25.7	26.6	27.6	28.5	29.5	30.5	31.4	32.4	33.4	34.4	35.3	41
42	16.9	17.8	18.7	19.6	20.6	21.5	22.4	23.4	24.3	25.3	26.2	27.2	28.1	29.1	30.1	31.0	32.0	33.0	33.9	34.9	35.9	42
43	17.3	18.2	19.1	20.1	21.0	21.9	22.9	23.8	24.8	25.8	26.7	27.7	28.6	29.6	30.6	31.6	32.5	33.5	34.5	35.5	36.5	43
44	17.7	18.6	19.6	20.5	21.5	22.4	23.4	24.3	25.3	26.2	27.2	28.2	29.2	30.1	31.1	32.1	33.1	34.1	35.0	36.0	37.0	44
45	18.1	19.0	20.0	20.9	21.9	22.9	23.8	24.8	25.8	26.7	27.7	28.7	29.7	30.6	31.6	32.6	33.6	34.6	35.6	36.6	37.5	45
46	18.5	19.4	20.4	21.4	22.3	23.3	24.3	25.2	26.2	27.2	28.2	29.2	30.1	31.1	32.1	33.1	34.1	35.1	36.1	37.1	38.1	46
47	18.9	19.8	20.8	21.8	22.8	23.7	24.7	25.7	26.7	27.7	28.6	29.6	30.6	31.6	32.6	33.6	34.6	35.6	36.6	37.6	38.6	47
48	19.2	20.2	21.2	22.2	23.2	24.2	25.1	26.1	27.1	28.1	29.1	30.1	31.1	32.1	33.1	34.1	35.1	36.1	37.1	38.1	39.1	48
49	19.6	20.6	21.6	22.6	23.6	24.6	25.6	26.6	27.6	28.6	29.6	30.6	31.6	32.5	33.5	34.5	35.5	36.5	37.5	38.5	39.5	49
50	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	50
51	20.4	21.4	22.4	23.4	24.4	25.4	26.4	27.4	28.4	29.4	30.4	31.4	32.4	33.4	34.4	35.4	36.4	37.4	38.5	39.5	40.5	51
52	20.7	21.8	22.8	23.8	24.8	25.8	26.8	27.8	28.8	29.9	30.9	31.9	32.9	33.9	34.9	35.9	36.9	37.9	38.9	39.9	40.9	52
53	21.1	22.1	23.2	24.2	25.2	26.2	27.2	28.2	29.3	30.3	31.3	32.3	33.3	34.3	35.3	36.3	37.3	38.3	39.3	40.3	41.3	53
54	21.5	22.5	23.5	24.6	25.6	26.6	27.6	28.6	29.7	30.7	31.7	32.7	33.7	34.7	35.7	36.7	37.7	38.7	39.7	40.7	41.7	54
55	21.8	22.9	23.9	24.9	26.0	27.0	28.0	29.0	30.1	31.1	32.1	33.1	34.1	35.1	36.1	37.1	38.1	39.1	40.1	41.1	42.2	55
56	22.2	23.2	24.3	25.3	26.3	27.4	28.4	29.4	30.4	31.5	32.5	33.5	34.5	35.5	36.5	37.5	38.5	39.5	40.5	41.5	42.5	56
57	22.5	23.6	24.6	25.7	26.7	27.7	28.8	29.8	30.8	31.8	32.9	33.9	34.9	35.9	36.9	37.9	38.9	39.9	40.9	41.9	42.9	57
58	22.9	23.9	25.0	26.0	27.1	28.1	29.1	30.2	31.2	32.2	33.2	34.3	35.3	36.3	37.3	38.3	39.3	40.3	41.3	42.3	43.3	58
59	23.2	24.3	25.3	26.4	27.4	28.5	29.5	30.5	31.6	32.6	33.6	34.6	35.6	36.7	37.7	38.7	39.7	40.7	41.7	42.7	43.7	59
60	23.5	24.6	25.7	26.7	27.8	28.8	29.9	30.9	31.9	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	60
61	23.9	25.0	26.0	27.1	28.1	29.2	30.2	31.3	32.3	33.3	34.3	35.3	36.4	37.4	38.4	39.4	40.4	41.4	42.4	43.4	44.4	61
62	24.2	25.3	26.4	27.4	28.5	29.5	30.6	31.6	32.6	33.7	34.7	35.7	36.7	37.7	38.7	39.7	40.7	41.7	42.7	43.7	44.7	62
63	24.5	25.6	26.7	27.8	28.8	29.9	30.9	31.9	33.0	34.0	35.0	36.0	37.1	38.1	39.1	40.1	41.1	42.1	43.1	44.1	45.1	63
64	24.9	25.9	27.0	28.1	29.1	30.2	31.2	32.3	33.3	34.3	35.4	36.4	37.4	38.4	39.4	40.4	41.4	42.4	43.4	44.4	45.4	64
65	25.2	26.3	27.3	28.4	29.5	30.5	31.6	32.6	33.6	34.7	35.7	36.7	37.7	38.7	39.7	40.7	41.7	42.7	43.7	44.7	45.7	65
66	25.5	26.6	27.7	28.7	29.8	30.8	31.9	32.9	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0	46.0	66
67	25.8	26.9	28.0	29.0	30.1	31.2	32.2	33.2	34.3	35.3	36.3	37.3	38.3	39.4	40.4	41.4	42.4	43.3	44.3	45.3	46.3	67
68	26.1	27.2	28.3	29.4	30.4	31.5	32.5	33.6	34.6	35.6	36.6	37.6	38.7	39.7	40.7	41.7	42.7	43.6	44.6	45.6	46.6	68
69	26.4	27.5	28.6	29.7	30.7	31.8	32.8	33.9	34.9	35.9	36.9	37.9	39.0	40.0	41.0	42.0	42.9	43.9	44.9	45.9	46.9	69
70	26.7	27.8	28.9	30.0	31.0	32.1	33.1	34.2	35.2	36.2	37.2	38.2	39.2	40.3	41.2	42.2	43.2	44.2	45.2	46.2	47.2	70
71	27.0	28.1	29.2	30.3	31.3	32.4	33.4	34.5	35.5	36.5	37.5	38.5	39.5	40.5	41.5	42.5	43.5	44.5	45.5	46.5	47.5	71
72	27.3	28.4	29.5	30.6	31.6	32.7	33.7	34.8	35.8	36.8	37.8	38.8	39.8	40.8	41.8	42.8	43.8	44.8	45.8	46.7	47.7	72
73	27.6	28.7	29.8	30.8	31.9	33.0	34.0	35.0	36.1	37.1	38.1	39.1	40.1	41.1	42.1	43.1	44.1	45.0	46.0	47.0	48.0	73
74	27.9	29.0	30.1	31.1	32.2	33.2	34.3	35.3	36.3	37.4	38.4	39.4	40.4	41.4	42.4	43.3	44.3	45.3	46.3	47.3	48.2	74
75	28.1	29.3	30.3	31.4	32.5	33.5	34.6	35.6	36.6	37.6	38.6	39.6	40.6	41.6	42.6	43.6	44.6	45.6	46.5	47.5	48.5	75
76	28.4	29.5	30.6	31.7	32.8	33.8	34.8	35.9	36.9	37.9	38.9	39.9	40.9	41.9	42.9	43.9	44.8	45.8	46.8	47.8	48.7	76
77	28.7	29.8	30.9	32.0	33.0	34.1	35.1	36.1	37.1	38.2	39.2	40.2	41.2	42.1	43.1	44.1	45.1	46.1	47.0	48.0	49.0	77
78	29.0	30.1	31.2	32.2	33.3	34.3	35.4	36.4	37.4	38.4	39.4	40.4	41.4	42.4	43.4	44.3	45.3	46.3	47.3	48.2	49.2	78
79	29.2	30.3	31.4	32.5	33.6	34.6	35.6	36.6	37.7	38.7	39.7	40.7	41.7	42.6	43.6	44.6	45.6	46.5	47.5	48.5	49.4	79
80	29.5	30.6	31.7	32.8	33.8	34.9	35.9	36.9	37.9	38.9	39.9	40.9	41.9	42.9	43.8	44.8	45.8	46.8	47.7	48.7	49.6	80
81	29.8	30.9	31.9	33.0	34.1	35.1	36.1	37.2	38.2	39.2	40.2	41.1	42.1	43.1	44.1	45.1	46.0	47.0	47.9	48.9	49.9	81
82	30.0	31.1	32.2	33.3	34.3	35.4	36.4	37.4	38.4	39.4	40.4	41.4	42.4	43.3	44.3	45.3	46.2	47.2	48.2	49.1	50.1	82
83	30.3	31.4	32.4	33.5	34.6	35.6	36.6	37.6	38.6	39.6	40.6	41.6	42.6	43.6	44.5	45.5	46.5	47.4	48.4	49.3	50.3	83
84	30.5	31.6	32.7	33.8	34.8	35.8	36.9	37.9	38.9	39.9	40.9	41.8	42.8	43.8	44.7	45.7	46.7	47.6	48.6	49.5	50.5	84
85	30.8	31.9	32.9	34.0	35.0	36.1	37.1	38.1	39.1	40.1	41.1	42.1	43.0	44.0	45.0	45.9	46.9	47.8	48.8	49.7	50.7	85
Years to bh	8	8	8	7	7	7	7	7	7	6	6	6	6	6	5	5	5	5	5	5	4	Years to bh

TABLE A-5. (Continued)

Ss

Age @ bh (years)	Site index: top height (m) @ breast height age 50 (Barker & Goudie)																					Age @ bh (years)
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
	Top height (m)																					
85	30.8	31.9	32.9	34.0	35.0	36.1	37.1	38.1	39.1	40.1	41.1	42.1	43.0	44.0	45.0	45.9	46.9	47.8	48.8	49.7	50.7	85
86	31.0	32.1	33.2	34.2	35.3	36.3	37.3	38.3	39.3	40.3	41.3	42.3	43.2	44.2	45.2	46.1	47.1	48.0	49.0	49.9	50.9	86
87	31.3	32.3	33.4	34.5	35.5	36.5	37.6	38.6	39.5	40.5	41.5	42.5	43.5	44.4	45.4	46.3	47.3	48.2	49.2	50.1	51.1	87
88	31.5	32.6	33.7	34.7	35.7	36.8	37.8	38.8	39.8	40.7	41.7	42.7	43.7	44.6	45.6	46.5	47.5	48.4	49.4	50.3	51.3	88
89	31.7	32.8	33.9	34.9	36.0	37.0	38.0	39.0	40.0	41.0	41.9	42.9	43.9	44.8	45.8	46.7	47.7	48.6	49.6	50.5	51.4	89
90	32.0	33.0	34.1	35.2	36.2	37.2	38.2	39.2	40.2	41.2	42.1	43.1	44.1	45.0	46.0	46.9	47.9	48.8	49.7	50.7	51.6	90
91	32.2	33.3	34.3	35.4	36.4	37.4	38.4	39.4	40.4	41.4	42.3	43.3	44.3	45.2	46.2	47.1	48.0	49.0	49.9	50.9	51.8	91
92	32.4	33.5	34.6	35.6	36.6	37.6	38.6	39.6	40.6	41.6	42.5	43.5	44.5	45.4	46.3	47.3	48.2	49.2	50.1	51.0	52.0	92
93	32.6	33.7	34.8	35.8	36.8	37.8	38.8	39.8	40.8	41.8	42.7	43.7	44.6	45.6	46.5	47.5	48.4	49.3	50.3	51.2	52.1	93
94	32.9	33.9	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	42.9	43.9	44.8	45.8	46.7	47.6	48.6	49.5	50.4	51.4	52.3	94
95	33.1	34.1	35.2	36.2	37.2	38.2	39.2	40.2	41.2	42.2	43.1	44.1	45.0	45.9	46.9	47.8	48.8	49.7	50.6	51.5	52.5	95
96	33.3	34.4	35.4	36.4	37.4	38.4	39.4	40.4	41.4	42.3	43.3	44.2	45.2	46.1	47.1	48.0	48.9	49.9	50.8	51.7	52.6	96
97	33.5	34.6	35.6	36.6	37.6	38.6	39.6	40.6	41.6	42.5	43.5	44.4	45.4	46.3	47.2	48.2	49.1	50.0	50.9	51.9	52.8	97
98	33.7	34.8	35.8	36.8	37.8	38.8	39.8	40.8	41.7	42.7	43.7	44.6	45.5	46.5	47.4	48.3	49.2	50.2	51.1	52.0	52.9	98
99	33.9	35.0	36.0	37.0	38.0	39.0	40.0	41.0	41.9	42.9	43.8	44.8	45.7	46.6	47.6	48.5	49.4	50.3	51.2	52.2	53.1	99
100	34.1	35.2	36.2	37.2	38.2	39.2	40.2	41.2	42.1	43.1	44.0	44.9	45.9	46.8	47.7	48.6	49.6	50.5	51.4	52.3	53.2	100
101	34.3	35.4	36.4	37.4	38.4	39.4	40.4	41.3	42.3	43.2	44.2	45.1	46.0	47.0	47.9	48.8	49.7	50.6	51.5	52.5	53.4	101
102	34.5	35.6	36.6	37.6	38.6	39.6	40.5	41.5	42.5	43.4	44.3	45.3	46.2	47.1	48.0	48.9	49.9	50.8	51.7	52.6	53.5	102
103	34.7	35.8	36.8	37.8	38.8	39.8	40.7	41.7	42.6	43.6	44.5	45.4	46.3	47.3	48.2	49.1	50.0	50.9	51.8	52.7	53.7	103
104	34.9	35.9	37.0	38.0	39.0	39.9	40.9	41.8	42.8	43.7	44.7	45.6	46.5	47.4	48.3	49.2	50.2	51.1	52.0	52.9	53.8	104
105	35.1	36.1	37.2	38.2	39.1	40.1	41.1	42.0	43.0	43.9	44.8	45.7	46.7	47.6	48.5	49.4	50.3	51.2	52.1	53.0	53.9	105
106	35.3	36.3	37.3	38.3	39.3	40.3	41.2	42.2	43.1	44.0	45.0	45.9	46.8	47.7	48.6	49.5	50.4	51.3	52.2	53.1	54.1	106
107	35.5	36.5	37.5	38.5	39.5	40.4	41.4	42.3	43.3	44.2	45.1	46.0	46.9	47.9	48.8	49.7	50.6	51.5	52.4	53.3	54.2	107
108	35.6	36.7	37.7	38.7	39.7	40.6	41.6	42.5	43.4	44.4	45.3	46.2	47.1	48.0	48.9	49.8	50.7	51.6	52.5	53.4	54.3	108
109	35.8	36.9	37.9	38.8	39.8	40.8	41.7	42.7	43.6	44.5	45.4	46.3	47.2	48.1	49.0	49.9	50.8	51.7	52.6	53.5	54.4	109
110	36.0	37.0	38.0	39.0	40.0	40.9	41.9	42.8	43.7	44.6	45.6	46.5	47.4	48.3	49.2	50.1	51.0	51.9	52.8	53.7	54.6	110
111	36.2	37.2	38.2	39.2	40.1	41.1	42.0	43.0	43.9	44.8	45.7	46.6	47.5	48.4	49.3	50.2	51.1	52.0	52.9	53.8	54.7	111
112	36.4	37.4	38.4	39.3	40.3	41.3	42.2	43.1	44.0	44.9	45.8	46.7	47.6	48.5	49.4	50.3	51.2	52.1	53.0	53.9	54.8	112
113	36.5	37.5	38.5	39.5	40.5	41.4	42.3	43.3	44.2	45.1	46.0	46.9	47.8	48.7	49.6	50.5	51.3	52.2	53.1	54.0	54.9	113
114	36.7	37.7	38.7	39.7	40.6	41.6	42.5	43.4	44.3	45.2	46.1	47.0	47.9	48.8	49.7	50.6	51.5	52.4	53.2	54.1	55.0	114
115	36.9	37.9	38.9	39.8	40.8	41.7	42.6	43.5	44.5	45.4	46.3	47.1	48.0	48.9	49.8	50.7	51.6	52.5	53.4	54.2	55.1	115
116	37.0	38.0	39.0	40.0	40.9	41.9	42.8	43.7	44.6	45.5	46.4	47.3	48.2	49.0	49.9	50.8	51.7	52.6	53.5	54.4	55.2	116
117	37.2	38.2	39.2	40.1	41.1	42.0	42.9	43.8	44.7	45.6	46.5	47.4	48.3	49.2	50.1	50.9	51.8	52.7	53.6	54.5	55.3	117
118	37.4	38.4	39.3	40.3	41.2	42.1	43.1	44.0	44.9	45.8	46.6	47.5	48.4	49.3	50.2	51.1	51.9	52.8	53.7	54.6	55.4	118
119	37.5	38.5	39.5	40.4	41.4	42.3	43.2	44.1	45.0	45.9	46.8	47.7	48.5	49.4	50.3	51.2	52.0	52.9	53.8	54.7	55.5	119
120	37.7	38.7	39.6	40.6	41.5	42.4	43.3	44.2	45.1	46.0	46.9	47.8	48.6	49.5	50.4	51.3	52.1	53.0	53.9	54.8	55.7	120
121	37.8	38.8	39.8	40.7	41.6	42.6	43.5	44.4	45.2	46.1	47.0	47.9	48.8	49.6	50.5	51.4	52.3	53.1	54.0	54.9	55.8	121
122	38.0	39.0	39.9	40.9	41.8	42.7	43.6	44.5	45.4	46.3	47.1	48.0	48.9	49.8	50.6	51.5	52.4	53.2	54.1	55.0	55.8	122
123	38.1	39.1	40.1	41.0	41.9	42.8	43.7	44.6	45.5	46.4	47.3	48.1	49.0	49.9	50.7	51.6	52.5	53.3	54.2	55.1	55.9	123
124	38.3	39.3	40.2	41.1	42.1	43.0	43.9	44.7	45.6	46.5	47.4	48.2	49.1	50.0	50.8	51.7	52.6	53.4	54.3	55.2	56.0	124
125	38.4	39.4	40.4	41.3	42.2	43.1	44.0	44.9	45.7	46.6	47.5	48.3	49.2	50.1	50.9	51.8	52.7	53.5	54.4	55.3	56.1	125
126	38.6	39.6	40.5	41.4	42.3	43.2	44.1	45.0	45.9	46.7	47.6	48.5	49.3	50.2	51.0	51.9	52.8	53.6	54.5	55.4	56.2	126
127	38.7	39.7	40.6	41.5	42.5	43.3	44.2	45.1	46.0	46.8	47.7	48.6	49.4	50.3	51.1	52.0	52.9	53.7	54.6	55.4	56.3	127
128	38.9	39.8	40.8	41.7	42.6	43.5	44.3	45.2	46.1	47.0	47.8	48.7	49.5	50.4	51.2	52.1	53.0	53.8	54.7	55.5	56.4	128
129	39.0	40.0	40.9	41.8	42.7	43.6	44.5	45.3	46.2	47.1	47.9	48.8	49.6	50.5	51.3	52.2	53.1	53.9	54.8	55.6	56.5	129
130	39.2	40.1	41.0	41.9	42.8	43.7	44.6	45.5	46.3	47.2	48.0	48.9	49.7	50.6	51.4	52.3	53.1	54.0	54.9	55.7	56.6	130
131	39.3	40.2	41.2	42.1	43.0	43.8	44.7	45.6	46.4	47.3	48.1	49.0	49.8	50.7	51.5	52.4	53.2	54.1	54.9	55.8	56.7	131
132	39.4	40.4	41.3	42.2	43.1	43.9	44.8	45.7	46.5	47.4	48.2	49.1	49.9	50.8	51.6	52.5	53.3	54.2	55.0	55.9	56.7	132
133	39.6	40.5	41.4	42.3	43.2	44.1	44.9	45.8	46.6	47.5	48.3	49.2	50.0	50.9	51.7	52.6	53.4	54.3	55.1	56.0	56.8	133
134	39.7	40.6	41.5	42.4	43.3	44.2	45.0	45.9	46.7	47.6	48.4	49.3	50.1	51.0	51.8	52.7	53.5	54.4	55.2	56.1	56.9	134
135	39.8	40.8	41.7	42.6	43.4	44.3	45.2	46.0	46.9	47.7	48.5	49.4	50.2	51.1	51.9	52.7	53.6	54.4	55.3	56.1	57.0	135
136	40.0	40.9	41.8	42.7	43.5	44.4	45.3	46.1	47.0	47.8	48.6	49.5	50.3	51.2	52.0	52.8	53.7	54.5	55.4	56.2	57.1	136
137	40.1	41.0	41.9	42.8	43.7	44.5	45.4	46.2	47.1	47.9	48.7	49.6	50.4	51.2	52.1	52.9	53.8	54.6	55.4	56.3	57.1	137
138	40.2	41.1	42.0	42.9	43.8	44.6	45.5	46.3	47.2	48.0	48.8	49.7	50.5	51.3	52.2	53.0	53.8	54.7	55.5	56.4	57.2	138
139	40.4	41.3	42.1	43.0	43.9	44.7	45.6	46.4	47.3	48.1	48.9	49.7	50.6	51.4	52.2	53.1	53.9	54.8	55.6	56.4	57.3	139
140	40.5	41.4	42.3	43.1	44.0	44.8	45.7	46.5	47.3	48.2	49.0	49.8	50.7	51.5	52.3	53.2	54.0	54.8	55.7	56.5	57.4	140
141	40.6	41.5	42.4	43.2	44.1	44.9	45.8	46.6	47.4	48.3	49.1	49.9	50.8	51.6	52.4	53.2	54.1	54.9	55.8	56.6	57.4	141
142	40.7	41.6	42.5	43.4	44.2	45.0	45.9	46.7	47.5	48.4	49.2	50.0	50.8	51.7	52.5	53.3	54.2	55.0	55.8	56.7	57.5	142
143	40.8	41.7	42.6	43.5	44.3	45.1	46.0	46.8	47.6	48.5	49.3	50.1	50.9	51.7	52.6	53.4	54.2	55.1	55.9	56.7	57.6	143
144	41.0	41.9	42.7	43.6	44.4	45.2	46.1	46.9	47.7	48.5	49.4	50.2	51.0	51.8	52.7	53.5	54.3	55.1	56.0	56.8	57.6	144
145	41.1	42.0	42.8	43.7	44.5	45.3	46.2	47.0	47.8	48.6	49.5	50.3	51.1	51.9	52.7	53.6	54.4	55.2	56.0	56.9	57.7	145
146	41.2	42.1	42.9	43.8	44.6	45.4	46.3	47.1	47.9	48.7	49.5	50.4	51.2	52.0	52.8	53.6	54.5	55.3	56.1	56.9	57.8	146
147	41.3	42.2	43.0	43.9	44.7	45.5	46.4	47.2	48.0	48.8	49.6	50.4	51.2	52.1	52.9	53.7	54.5	55.3	56.2	57.0	57.8	147
148	41.4	42.3	43.1	44.0	44.8	45.6	46.5	47.3	48.1	48.9	49.7	50.5	51.3	52.1	53.0	53.8	54.6	55.4	56.2	57.1	57.9	148
149	41.5	42.4	43.3	44.1	44.9	45.7	46.5	47.4	48.2	49.0	49.8	50.6	51.4	52.2	53.0	53.8	54.7	55.5	56.3	57.1	58.0	149
150	41.7	42.5	43.4	44.2	45.0	45.8	46.6	47.4	48.3	49.1	49.9	50.7	51.5	52.3	53.1	53.9	54.7	55.6	56.4	57.2	58.0	150
Years to bh	8	8	8	7	7	7	7	7	7	6	6	6	6	6	5	5	5	5	5	5	4	Years to bh

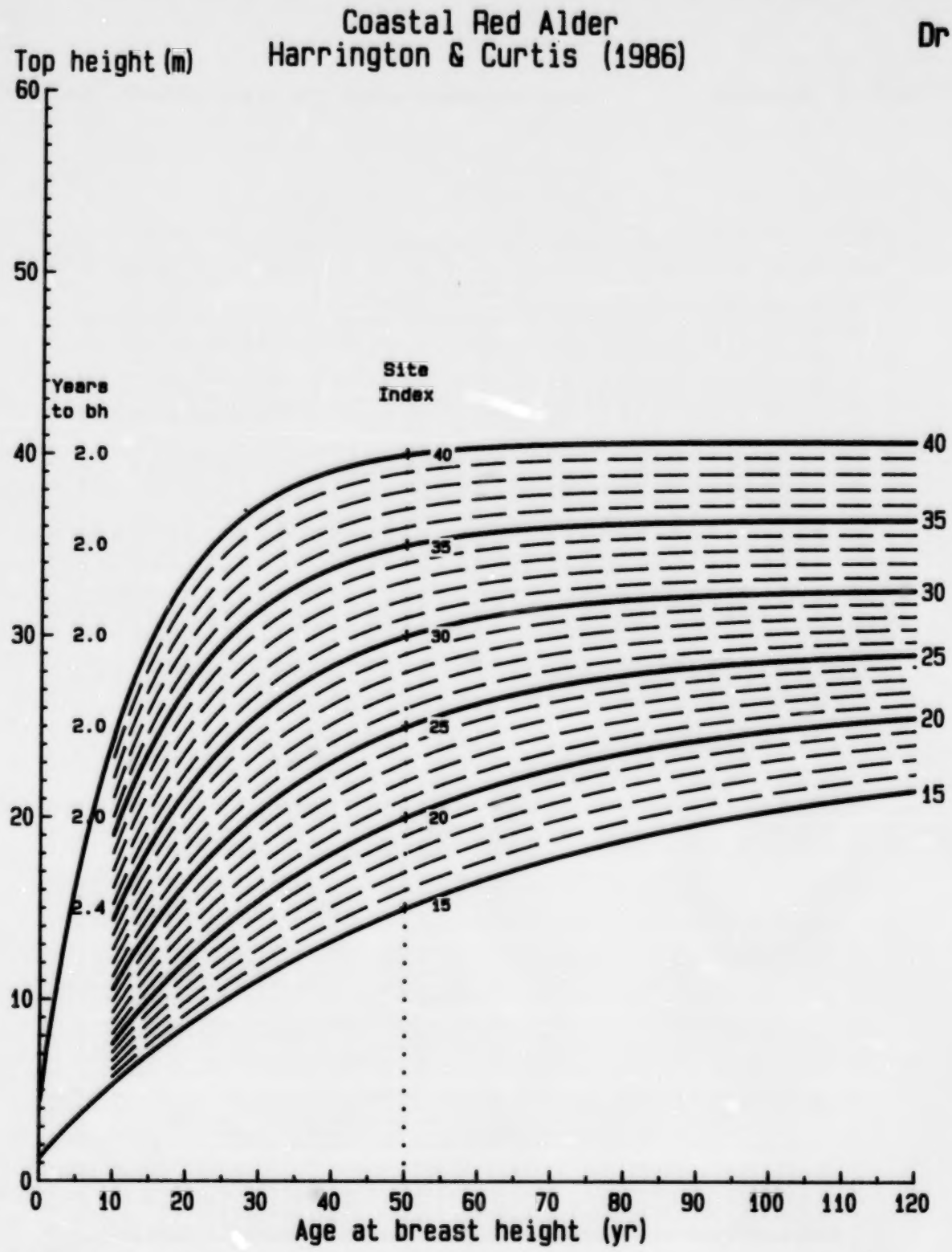

FIGURE A-6. Site index curves for second-growth coastal red alder.

TABLE A-6. Site index table for second-growth coastal red alder

Dr

Age @ bh (years)	Site index: top height (m) @ breast height age 50 (Harrington & Curtis 1986)																					Age @ bh (years)
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
	Top height (m) ◄																					
10	7.6	8.1	8.6	9.3	9.9	10.5	11.2	11.9	12.7	13.5	14.3	15.2	16.1	17.0	18.0	19.0	20.0	21.1	22.1	23.3	24.4	10
11	8.1	8.6	9.2	9.9	10.5	11.2	12.0	12.7	13.5	14.3	15.2	16.1	17.0	18.0	19.0	20.0	21.1	22.2	23.3	24.5	25.6	11
12	8.6	9.2	9.8	10.5	11.2	11.9	12.7	13.4	14.3	15.1	16.0	17.0	17.9	19.0	20.0	21.0	22.1	23.2	24.4	25.6	26.7	12
13	9.0	9.7	10.3	11.0	11.8	12.5	13.3	14.1	15.0	15.9	16.8	17.8	18.8	19.8	20.9	22.0	23.1	24.2	25.4	26.6	27.8	13
14	9.5	10.2	10.9	11.6	12.3	13.1	14.0	14.8	15.7	16.6	17.6	18.6	19.6	20.7	21.7	22.9	24.0	25.1	26.3	27.5	28.7	14
15	10.0	10.7	11.4	12.1	12.9	13.7	14.6	15.5	16.4	17.3	18.3	19.3	20.4	21.5	22.6	23.7	24.8	26.0	27.2	28.4	29.6	15
16	10.4	11.1	11.9	12.7	13.5	14.3	15.2	16.1	17.0	18.0	19.0	20.0	21.1	22.2	23.3	24.5	25.6	26.8	28.0	29.2	30.4	16
17	10.8	11.6	12.3	13.2	14.0	14.8	15.7	16.7	17.6	18.6	19.6	20.7	21.8	22.9	24.0	25.2	26.4	27.5	28.8	30.0	31.2	17
18	11.3	12.0	12.8	13.6	14.5	15.4	16.3	17.2	18.2	19.2	20.3	21.3	22.4	23.6	24.7	25.9	27.1	28.2	29.5	30.7	31.9	18
19	11.7	12.4	13.2	14.1	15.0	15.9	16.8	17.8	18.8	19.8	20.9	21.9	23.0	24.2	25.3	26.5	27.7	28.9	30.1	31.4	32.6	19
20	12.1	12.9	13.7	14.6	15.4	16.4	17.3	18.3	19.3	20.3	21.4	22.5	23.6	24.8	25.9	27.1	28.3	29.5	30.7	32.0	33.2	20
21	12.4	13.3	14.1	15.0	15.9	16.8	17.8	18.8	19.8	20.9	21.9	23.0	24.2	25.3	26.5	27.7	28.9	30.1	31.3	32.5	33.7	21
22	12.8	13.6	14.5	15.4	16.3	17.3	18.3	19.3	20.3	21.4	22.5	23.6	24.7	25.9	27.0	28.2	29.4	30.6	31.8	33.0	34.3	22
23	13.2	14.0	14.9	15.8	16.7	17.7	18.7	19.7	20.8	21.8	22.9	24.0	25.2	26.3	27.5	28.7	29.9	31.1	32.3	33.5	34.7	23
24	13.5	14.4	15.3	16.2	17.2	18.1	19.1	20.2	21.2	22.3	23.4	24.5	25.6	26.8	28.0	29.2	30.4	31.5	32.8	34.0	35.2	24
25	13.9	14.7	15.6	16.6	17.5	18.5	19.6	20.6	21.6	22.7	23.8	24.9	26.1	27.3	28.4	29.6	30.8	32.0	33.2	34.4	35.6	25
26	14.2	15.1	16.0	17.0	17.9	18.9	19.9	21.0	22.0	23.1	24.2	25.4	26.5	27.7	28.8	30.0	31.2	32.4	33.6	34.8	36.0	26
27	14.5	15.4	16.4	17.3	18.3	19.3	20.3	21.4	22.4	23.5	24.6	25.8	26.9	28.1	29.2	30.4	31.6	32.8	33.9	35.2	36.3	27
28	14.8	15.8	16.7	17.7	18.6	19.7	20.7	21.7	22.8	23.9	25.0	26.1	27.3	28.4	29.6	30.8	31.9	33.1	34.3	35.5	36.7	28
29	15.1	16.1	17.0	18.0	19.0	20.0	21.0	22.1	23.2	24.3	25.4	26.5	27.6	28.8	29.9	31.1	32.3	33.4	34.6	35.8	37.0	29
30	15.4	16.4	17.3	18.3	19.3	20.3	21.4	22.4	23.5	24.6	25.7	26.8	28.0	29.1	30.3	31.4	32.6	33.7	34.9	36.1	37.2	30
31	15.7	16.7	17.6	18.6	19.6	20.7	21.7	22.8	23.8	24.9	26.0	27.2	28.3	29.4	30.6	31.7	32.9	34.0	35.2	36.4	37.5	31
32	16.0	17.0	17.9	18.9	19.9	21.0	22.0	23.1	24.2	25.2	26.4	27.5	28.6	29.7	30.9	32.0	33.2	34.3	35.4	36.6	37.7	32
33	16.3	17.3	18.2	19.2	20.2	21.3	22.3	23.4	24.5	25.5	26.7	27.8	28.9	30.0	31.1	32.3	33.4	34.5	35.7	36.8	38.0	33
34	16.6	17.5	18.5	19.5	20.5	21.6	22.6	23.7	24.7	25.8	26.9	28.0	29.2	30.3	31.4	32.5	33.7	34.8	35.9	37.1	38.2	34
35	16.8	17.8	18.8	19.8	20.8	21.8	22.9	24.0	25.0	26.1	27.2	28.3	29.4	30.5	31.6	32.8	33.9	35.0	36.1	37.3	38.4	35
36	17.1	18.1	19.0	20.1	21.1	22.1	23.2	24.2	25.3	26.4	27.5	28.6	29.7	30.8	31.9	33.0	34.1	35.2	36.3	37.4	38.5	36
37	17.3	18.3	19.3	20.3	21.3	22.4	23.4	24.5	25.5	26.6	27.7	28.8	29.9	31.0	32.1	33.2	34.3	35.4	36.5	37.6	38.7	37
38	17.6	18.5	19.5	20.6	21.6	22.6	23.7	24.7	25.8	26.9	27.9	29.0	30.1	31.2	32.3	33.4	34.5	35.6	36.7	37.8	38.8	38
39	17.8	18.8	19.8	20.8	21.8	22.9	23.9	25.0	26.0	27.1	28.2	29.2	30.3	31.4	32.5	33.6	34.7	35.7	36.8	37.9	39.0	39
40	18.0	19.0	20.0	21.0	22.1	23.1	24.1	25.2	26.2	27.3	28.4	29.4	30.5	31.6	32.7	33.7	34.8	35.9	37.0	38.1	39.1	40
41	18.2	19.2	20.2	21.3	22.3	23.3	24.4	25.4	26.4	27.5	28.6	29.6	30.7	31.8	32.8	33.9	35.0	36.0	37.1	38.2	39.2	41
42	18.5	19.5	20.5	21.5	22.5	23.5	24.6	25.6	26.7	27.7	28.8	29.8	30.9	31.9	33.0	34.1	35.1	36.2	37.2	38.3	39.4	42
43	18.7	19.7	20.7	21.7	22.7	23.7	24.8	25.8	26.8	27.9	28.9	30.0	31.0	32.1	33.2	34.2	35.3	36.3	37.4	38.4	39.5	43
44	18.9	19.9	20.9	21.9	22.9	23.9	25.0	26.0	27.0	28.1	29.1	30.2	31.2	32.3	33.3	34.3	35.4	36.4	37.5	38.5	39.6	44
45	19.1	20.1	21.1	22.1	23.1	24.1	25.2	26.2	27.2	28.2	29.3	30.3	31.4	32.4	33.4	34.5	35.5	36.5	37.6	38.6	39.6	45
46	19.3	20.3	21.3	22.3	23.3	24.3	25.3	26.4	27.4	28.4	29.4	30.5	31.5	32.5	33.6	34.6	35.6	36.6	37.7	38.7	39.7	46
47	19.5	20.5	21.5	22.5	23.5	24.5	25.5	26.5	27.5	28.6	29.6	30.6	31.6	32.7	33.7	34.7	35.7	36.7	37.8	38.8	39.8	47
48	19.6	20.7	21.6	22.7	23.7	24.7	25.7	26.7	27.7	28.7	29.7	30.7	31.8	32.8	33.8	34.8	35.8	36.8	37.8	38.9	39.9	48
49	19.8	20.8	21.8	22.8	23.8	24.8	25.8	26.9	27.9	28.9	29.9	30.9	31.9	32.9	33.9	34.9	35.9	36.9	37.9	38.9	39.9	49
50	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	50
51	20.2	21.2	22.2	23.2	24.2	25.1	26.2	27.1	28.1	29.1	30.1	31.1	32.1	33.1	34.1	35.1	36.1	37.1	38.1	39.1	40.1	51
52	20.3	21.3	22.3	23.3	24.3	25.3	26.3	27.3	28.3	29.3	30.2	31.2	32.2	33.2	34.2	35.2	36.2	37.1	38.1	39.1	40.1	52
53	20.5	21.5	22.5	23.5	24.5	25.4	26.4	27.4	28.4	29.4	30.4	31.3	32.3	33.3	34.3	35.2	36.2	37.2	38.2	39.2	40.2	53
54	20.7	21.7	22.6	23.6	24.6	25.6	26.6	27.5	28.5	29.5	30.5	31.4	32.4	33.4	34.3	35.3	36.3	37.3	38.2	39.2	40.2	54
55	20.8	21.8	22.8	23.8	24.7	25.7	26.7	27.7	28.6	29.6	30.6	31.5	32.5	33.5	34.4	35.4	36.4	37.3	38.3	39.3	40.2	55
56	21.0	22.0	22.9	23.9	24.9	25.8	26.8	27.8	28.7	29.7	30.7	31.6	32.6	33.5	34.5	35.5	36.4	37.4	38.3	39.3	40.3	56
57	21.1	22.1	23.1	24.1	25.0	26.0	26.9	27.9	28.9	29.8	30.8	31.7	32.7	33.6	34.6	35.5	36.5	37.4	38.4	39.4	40.3	57
58	21.2	22.2	23.2	24.2	25.1	26.1	27.1	28.0	29.0	29.9	30.9	31.8	32.7	33.7	34.6	35.6	36.5	37.5	38.4	39.4	40.3	58
59	21.4	22.4	23.3	24.3	25.3	26.2	27.2	28.1	29.1	30.0	30.9	31.9	32.8	33.8	34.7	35.6	36.6	37.5	38.5	39.4	40.4	59
60	21.5	22.5	23.5	24.4	25.4	26.3	27.3	28.2	29.1	30.1	31.0	31.9	32.9	33.8	34.7	35.7	36.6	37.6	38.5	39.5	40.4	60
61	21.7	22.6	23.6	24.6	25.5	26.4	27.4	28.3	29.2	30.2	31.1	32.0	32.9	33.9	34.8	35.7	36.7	37.6	38.5	39.5	40.4	61
62	21.8	22.8	23.7	24.7	25.6	26.5	27.5	28.4	29.3	30.2	31.2	32.1	33.0	33.9	34.8	35.8	36.7	37.6	38.6	39.5	40.5	62
63	21.9	22.9	23.8	24.8	25.7	26.6	27.6	28.5	29.4	30.3	31.2	32.1	33.1	34.0	34.9	35.8	36.7	37.7	38.6	39.5	40.5	63
64	22.0	23.0	23.9	24.9	25.8	26.7	27.7	28.6	29.5	30.4	31.3	32.2	33.1	34.0	34.9	35.9	36.8	37.7	38.6	39.6	40.5	64
65	22.1	23.1	24.0	25.0	25.9	26.8	27.8	28.7	29.6	30.5	31.4	32.3	33.2	34.1	35.0	35.9	36.8	37.7	38.7	39.6	40.5	65
66	22.3	23.2	24.2	25.1	26.0	26.9	27.8	28.7	29.6	30.5	31.4	32.3	33.2	34.1	35.0	35.9	36.8	37.7	38.7	39.6	40.5	66
67	22.4	23.3	24.3	25.2	26.1	27.0	27.9	28.8	29.7	30.6	31.5	32.4	33.3	34.2	35.1	36.0	36.9	37.8	38.7	39.6	40.6	67
68	22.5	23.4	24.4	25.3	26.2	27.1	28.0	28.9	29.8	30.7	31.5	32.4	33.3	34.2	35.1	36.0	36.9	37.8	38.7	39.7	40.6	68
69	22.6	23.5	24.5	25.4	26.3	27.2	28.1	29.0	29.8	30.7	31.6	32.5	33.4	34.2	35.1	36.0	36.9	37.8	38.7	39.7	40.6	69
70	22.7	23.6	24.6	25.5	26.4	27.3	28.1	29.0	29.9	30.8	31.6	32.5	33.4	34.3	35.2	36.0	16.9	37.8	38.8	39.7	40.6	70
71	22.8	23.7	24.6	25.6	26.4	27.3	28.2	29.1	30.0	30.8	31.7	32.6	33.4	34.3	35.2	36.1	37.0	37.9	38.8	39.7	40.6	71
72	22.9	23.8	24.7	25.6	26.5	27.4	28.3	29.1	30.0	30.9	31.7	32.6	33.5	34.3	35.2	36.1	37.0	37.9	38.8	39.7	40.6	72
73	23.0	23.9	24.8	25.7	26.6	27.5	28.4	29.2	30.1	30.9	31.8	32.6	33.5	34.4	35.2	36.1	37.0	37.9	38.8	39.7	40.6	73
74	23.1	24.0	24.9	25.8	26.7	27.5	28.4	29.3	30.1	31.0	31.8	32.7	33.5	34.4	35.3	36.1	37.0	37.9	38.8	39.7	40.6	74
75	23.2	24.1	25.0	25.9	26.7	27.6	28.5	29.3	30.2	31.0	31.9	32.7	33.6	34.4	35.3	36.2	37.0	37.9	38.8	39.7	40.7	75
Years to bh	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	Years to bh